

If the environment is right...



things can go wrong

#### and acute cystitis can result.

Urino can act as a culture medium for the growth of *E. coli* and other organisms.<sup>1</sup> When urine is contaminated, bacterial proliferation is influenced by several factors—rate of urino flow, frequency of voiding, volume of residual urine and antibacterial action of the bladder mucosa.<sup>2</sup> When the concentration of bacteria builds to a high enough level in the urine, acute cystitis usually develops.

#### Gantanol® (sulfamethoxazole) for early, decisive control

Early, aggressive therapy with Gantanol (sulfamethoxazole) may control acute, nonobstructed cystitis due to *E. coli* and other susceptible gram-negative and gram-positive organisms commonly implicated in urinary tract infections, and thus help prevent chronic or ascending infection.

#### rapid, long-lasting antibacterial levels

Peak therapeutic effectiveness starts within 2 to 3 hours of the initial 2-Gm adult dose. Each subsequent 1-Gm dose maintains therapeutic blood and urine levels up to 12 hours.

#### prompt clinical response

Significant symptomatic improvement of acute cystitis often occurs within 24 to 48 hours after the start of Gantanol therapy. In fact, symptoms may subside so rapidly that it is important to emphasize that patients continue medication until treatment is adequate. The usual precautions in sulfonamide therapy should be observed, including maintenance of adequate fluid intake.

#### your option: tablets or suspension

Gantanol comes in two b.i.d. dosage forms providing around-the-clock therapy—tablets or pleasant-tasting, cherry-flavored suspension. Either way, Gantanol is effective, convenient and economical therapy in non-obstructed urinary tract infections caused by susceptible organisms.

References: 1. Asscher, A. W., Susman, M., and Weiser, R. *Urol. Dig.*, 7:422, 1968. 2. O'Grady, R., and Cattell, W. R., *Brit. J. Urol.*, 38:150, 1966.

Before prescribing, please consult complete product information, a summary of which follows.

**Indications:** Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add methanazole acid to culture media of patients receiving sulfonamides. Resistant organisms present a current problem to the usefulness of antimicrobial agents. Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sulfonamide level, as adverse reactions occur more frequently above this level.

**Contraindications:** Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

**Warnings:** Safe use in pregnancy has not been established, and teratogenic potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, i.e., rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

**Precautions:** Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate deficiency.

drug-resistant individuals. In the latter, dose-related hemolysis may occur. Monitor adequate fluid intake to prevent crystalluria and stone formation.

**Adverse Reactions:** Blood dyscrasias: agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinuria; allergic reactions: erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, conjunctival and scleral injection, photosensitivity, arthralgia and allergic myocarditis; gastrointestinal reactions: nausea, vomiting, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; **C.N.S. reactions:** headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and miscellaneous reactions: drug fever, chills, toxic nephrosis with oliguria and anuria, pericarditis nodosa and E.E. phenomenon. Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diabetes and hypoglycemia. Cross-sensitivity with these agents may exist.

**Dosages:** Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

**Adults:** 2 Gm (4 tabs or teasp.) initially, then 1 Gm b.i.d. or t.i.d., depending on severity of infection. **Children:** 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs b.i.d. Maximum dose for children should not exceed 75 mg/kg/24 hrs.

**Supplied:** Each tablet or teaspoonful (5 ml) of suspension contains 0.5 Gm sulfamethoxazole.

Roche Laboratories, Division of Hoffmann-La Roche Inc., Nutley, N.J. 07110

right for acute, nonobstructed cystitis

**Gantanol® B.I.D.**  
(sulfamethoxazole)

Tablets/Suspension  
12 hours of therapy with every dose

# Medical Tribune

and  
Medical News

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A B

world news of medicine and its practice—fast, accurate, complete

Wednesday, October 6, 1971  
Vol. 12, No. 39

## Breast Cancer Excision Less With Selection

Medical Tribune World Service

PARIS—More careful selection of candidates for various types of treatment is expected to spare many women with breast cancer the disfiguring and psychologically traumatic experience of radical mastectomy, a group of scientists agreed here at a round table conducted by the European Organization for Research on Treatment of Cancer. The session was held at the Centre National de Recherche Scientifique.

Much of the support for the belief came from a preliminary report by Dr. John Hayward, a research fellow of the department of surgery, Guy's Hospital, London, on a study of more than 400 patients conducted in that city. Designed to reveal the relative effectiveness of different kinds of operations, the study has in recent weeks been indicating that certain signs can be used to select candidates for different operations. "This is highly preliminary," Dr. Hayward told *Medical Tribune*, "and should not be interpreted as a final and definitive result."

Dr. Hayward's study was designed to show the difference between results obtained by radical mastectomy and the much smaller operation of wide excision. As defined and used in the study, wide excision entailed removing the tumor from

Continued on page 19

## For Lung Cripples



Portable lung is checked by Dr. E. C. Peirce, designer, and Nancy Johnson, R.N., at Mount Sinai Medical Center, New York. Now being tested on dogs, clinical trials are predicted in five years. Device may aid patients severely crippled by respiratory diseases. It was described at artificial organs symposium at N.Y.U. Medical Center.

## Columbia University Survey of Drug Use

### 15% of Young Americans Have Smoked Marijuana

Medical Tribune Report

NEWARK, N.J.—About 15 per cent of Americans from 12 to 17 years of age—17 per cent of the boys and 14 per cent of the girls—have smoked marijuana, according to a survey of adolescent drug use by the Columbia University School of Public Health.

The results of the national household-based survey—described as the first of its kind—were reported here at the first International Conference on Student Drug Surveys.

In addition to charting the use of marijuana by region, age, and sex, the survey obtained information about the use of amphetamines, barbiturates, glue, LSD, heroin, cigarettes, and alcohol.

The study was designed to serve as a kind of national yardstick for Columbia's ongoing investigation of drug behavior among 35,000 students in 25 high schools in four regions of the United States.

The investigators grouped 9 per cent of Continued on page 24

## Vitamin A Lack In United States Seen Neglected

Medical Tribune Report

BAL HARBOUR, FLA.—Disagreement over precise standards for human vitamin A requirements could be overshadowing the warnings of several surveys that some North Americans have serious vitamin A deficiencies, the third Western Hemisphere Nutrition Congress was told here.

"Let us not argue the fine details of the problem with such fervor that we forget the goal—an acceptable vitamin A status for the whole population," cautioned T. Keith Murray, Ph.D., chief of the Nutrition Research Division of Canada's Food and Drug Directorate.

Referring to the large number of diet surveys made since recommended daily allowances were developed, Dr. Murray said two features stand out: frequent reports of insufficient vitamin A intake and their relative lack of impact on public health programs.

"This is a pity," he said, "because diet surveys should be the early warning part of our surveillance system."

Part of the problem is a lack of agreement on where to draw the lines defining deficiency, impending deficiency, or proper intake, he said. For instance, the United States recommends 5,000 I.U. of Vitamin A as a daily intake, while Canada sets 3,700.

"The assumption is that an intake of 5,000 I.U. will ensure adequate blood levels and liver stores of the vitamin," Dr. Murray remarked, "but if you happen to be a Canadian, 3,700 I.U. will provide the same insurance."

In many cases, he said, low intakes and even low vitamin A blood levels have been found with no physical symptoms apparent. But in at least one survey, among Continued on page 21

## Sickle-Cell Anemia Diagnosed By 5 Newly Developed Tests

Medical Tribune Report

CHICAGO—The development of five new tests for the diagnosis of sickle-cell anemia was reported here at the 24th annual meeting of the American Association of Blood Banks by a team headed by Dr. Paul L. Wolf, Associate Professor of Pathology at Stanford University, and Dr. Robert M. Nalbandian, associate pathologist at Blodgett Memorial Hospital, Grand Rapids, Mich. Four of the tests may be

performed within minutes at a cost of 2-8¢ each, and will permit mass screenings of the black population across the country, Dr. Wolf said.

A year ago, he related, the research team unveiled a new treatment of sickle-cell anemia—the intravenous infusion of urea in invert sugar—based on the definition of the molecular mechanism of sickling by Makio Murayama, Ph.D., of the National

Continued on page 19

## Authorities in U.K. No Longer Requiring Smallpox Immunity

Medical Tribune World Service

From British Edition

LONDON—British health authorities will no longer require routine immunization of children against smallpox.

The nearly complete eradication of smallpox throughout the world and the absence of any significant risk of infection in the British Isles have made routine vaccination unnecessary, health officials said.

The decision was announced in the House of Commons following a recommendation by the Department of Health's joint committee on vaccination and immunization. The action had been predicted two weeks earlier by *Medical News-Tribune* (British sister paper of *Medical Tribune*).

Sir Keith Joseph, Secretary of State for Social Services, told the House that smallpox is now endemic in only a relatively small part of Africa and in portions of the Indian subcontinent. He credited the eradication campaign of the World Health Organization for the virtual elimination of the smallpox risk in most nations.

The joint committee has concluded that Britons today are less likely to be exposed to the threat of smallpox infection than at any time since the disease was first recorded here several centuries ago.

In fact, Dr. George Gabor, the depart- Continued on page 19



Display depicting dilution test for hemoglobin S is demonstrated to Dr. William Quentin Ascarl of Somerville, N. J., by Robert M. Nalbandian, co-chairman, of Grand Rapids, Mich., at American Association of Blood Banks convention in Chicago. It provides rapid, inexpensive technique for automated screening of donor blood.

## Evidence Is Found That Aging 'Turns Off' Protein Synthesis

Medical Tribune Report

BAR HARBOR, ME.—The concept of aging as an active process that "turns off" protein synthesis at the production level was supported in a report here that points to an inhibitor for damping the translational mechanism of genetic instructions.

The work, described by Bernard L. Streher, Ph.D., of the University of Southern California, apparently furorates the first solid evidence for such a phenomenon in an aging biologic system.

Although the inhibitor itself has not yet been isolated, "we're working on it," said Dr. Streher. He said the material co-

celtively could turn out to be analogous to the "chaperones" that inhibit such functions as skin cell mitosis in animals.

The U.S.C. experiments, conducted principally by Michael D. Blek, Ph.D., were done with soybean plant cotyledons, the embryo leaves that spring from the seeds. The cotyledon, which functions for hardly more than three weeks while the plant is budding its more specialized leaves, furnishes an accelerated example of the aging process.

To study possible changes in the translational machinery during aging, Drs. Blek and Streher measured the differential

ability of transfer RNA (tRNA) to become "charged" at times early and late in the cotyledon life.

tRNA rounds up amino acids from the cytoplasm for stringing together into protein molecules according to the plan brought from the cell nucleus by messenger RNA. However, to grab a specific amino acid a specific tRNA needs the help of a specific enzyme—a synthetase that charges the tRNA.

The U.S.C. investigators worked with the mechanism for one amino acid, leucine. Since the redundancy of the genetic Continued on page 22

## Combination Therapy Benefit to Children With Sarcoma Cases

Medical Tribune World Service

GENOA, ITALY—Rigorous treatment with radiotherapy and cytotoxic "cocktails" has given remarkable results in child patients suffering from malignant lymphoma, a South African pediatric surgeon has reported.

Dr. S. Cywes, of the Department of Pediatric Surgery at the University of Cape Town, told the 18th International Congress of Pediatric Surgeons here that preliminary results of his work had led to a 73 per cent survival rate in 26 patients since the start of treatment in 1968.

This compares favorably, he said, with an 11 per cent survival rate for patients between 1951 and 1958. These patients were treated by surgery, sometimes with or without radiotherapy. Simple application of cytotoxics from 1959 to 1967 raised the survival rate to 20 per cent.

### Principal Agents Listed

The principal agents used, he said, are mechlorethamine hydrochloride (nitrogen mustard), cyclophosphamide, and vinblastine. From 1959 to 1967, as these agents were being developed, there were 61 cases with 12 survivors. High-voltage radiotherapy is applied, to 3,400 rads in four to five weeks, in cases of Hodgkin's and giant follicular lymphoma and nonspecific lymphoma, where the disease is localized to a single lymphatic chain or extranodal site, and where the disease is limited to two or more lymphatic chains and/or extranodal sites above and below the diaphragm.

In cases where the disease is present above and below the diaphragm and when generalized or with hepatomegaly, splenomegaly, or C.N.S. or bone marrow invasion, the cytotoxic "cocktail" is administered.

### Cytotoxic Treatment Described

The cytotoxic treatment consists of mechlorethamine hydrochloride 6 mg./sq. M. body surface, on days one and seven; vinblastine 1.4 mg./sq. M. body surface at days one and seven; daily procarbazine 100 mg./sq. M. body surface and daily prednisone 40 mg./sq. M. body surface.

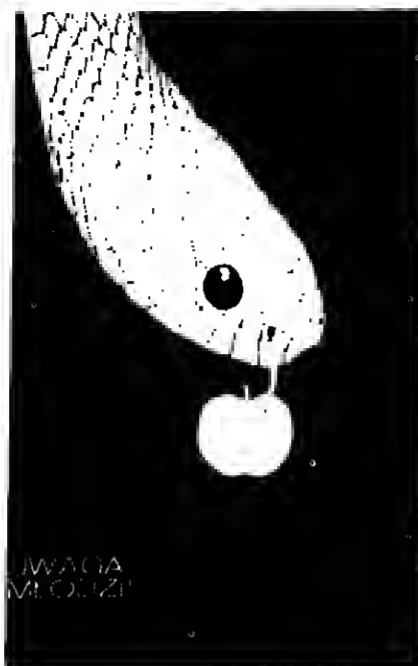
As part of the treatment, two weeks of chemotherapy is followed by two weeks rest for six courses.

"During the two weeks of therapy mustard and vinblastine are given intravenously on day one and day seven with daily procarbazine and daily prednisone through the 14-day period," he said.

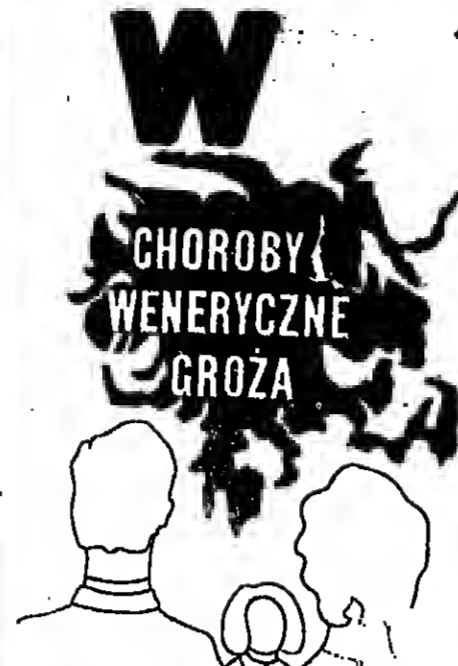
In cases of lymphosarcoma and reticulocellular sarcoma and Burkitt-type lymphoma, cyclophosphamide is given at all stages in massive doses of about 50 mg./Kg. intravenously every two to three weeks for six courses.

Of 26 children treated so far, there have been 18 survivors up to now, Dr. Cywes said. Survival in cases of Hodgkin's and giant follicular lymphoma is 91 per cent and reticulocellular sarcoma 60 per cent.

## Posters Aid Attack on Venereal Disease



Polish poster warns country's youth that venereal diseases are rapidly spreading.



Poster with symbol of disease cautions, "Be warned—VD is a growing menace."

## Authorities in Poland Launch Campaign to Check VD Spread

Medical Tribune World Service

WARSAW—More than a million posters are on display throughout Poland as part of a drive by the health authorities to check the spread of venereal diseases.

The campaign places emphasis on public information, stepped-up training in venereology for doctors and nurses, and stricter hospital and pre-employment checks.

### Number Dropped in 1970

In 1970, after seven years of steady increase, the number of reported cases of early manifest syphilis dropped by 1,700. The gonorrhea picture, although the trend is still slightly upward, also showed a significant improvement.

Swift and effective action halted an epidemic of VD in Poland in the years immediately after World War II when the country was in severe economic difficulties and gravely short of manpower, medical equipment, and drugs, health officials said.

More recently, moving out of the classic focus in densely populated seaports, venereal diseases have again become a problem in the relatively affluent modern Polish society, particularly in teenagers.

Officially reported cases of early infectious syphilis more than doubled between 1964 and 1968, from 7,435 to 16,153. Gonorrhea cases also climbed steeply, according to official returns, rising from 38,449 in 1963 to 48,910 in 1968. Experts consider, however, that these figures are too low to give an accurate picture of the situation.

To strengthen the fight against venereal diseases, the state machinery for handling the problem has been revamped. The Institute of Venereology in Warsaw, dissolved in 1957, was set up again in 1970 with the aim of taking over coordination of all anti-VD work in the country.

The report was presented by Dr. P. Confortini, of the Ospedale Civile, Verona, Italy, to the eighth Conference of the European Dialysis and Transplant Association.

The patient, now 34, has been attending R.D.T. for severe renal failure following chronic glomerulonephritis since 1967. Her pregnancy was discovered in January,

1970, and against medical advice she insisted on having her child.

During pregnancy, no change in pressure was observed. Humoral changes were: BUN +15 per cent; creatinine +25 per cent; uric acid +20 per cent. Ten whole blood transfusions were made.

Weight increase was kept within the normal range and totaled 9.5 Kg. No special clinical problems arose in the course of the pregnancy, and in September the woman gave birth easily to a male child weighing 1.95 Kg.

The child had the same humoral values as the mother for BUN, creatinine, and uric acid but had no anemia. Polyuria normalized humoral balance in five days.

## Pregnancy Is Brought to Term Under Hemodialysis

Medical Tribune World Service

EAST BERLIN—A report was made here on what the author believes to be the first case in the world of a patient who conceived and brought her pregnancy to full term while she was undergoing regular hemodialysis.

The report was presented by Dr. P. Confortini, of the Ospedale Civile, Verona, Italy, to the eighth Conference of the European Dialysis and Transplant Association.

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## Antimalarial Drug Found Helpful Against Leprosy

Medical Tribune World Service

MANILA—A drug once used for the treatment of malaria has been found to be more effective against leprosy than dapsone, Dr. Ilaniani Garcia reported to the annual convention here of the Association of Philippine Military Surgeons.

The drug, 2-methoxy-6-chloro-9-acridine, is enhanced by combination with dapsone, he said.

A two-year controlled study of 40 patients at the Tala Leprosarium showed that there was a complete remission of lesions, pain, and fever following treatment with a combination of the two drugs, Dr. Garcia said.

When 2-methoxy-6-chloro-9-acridine alone was injected subcutaneously for three to 12 months, all patients showed marked regression of symptoms and complete relief from nasal congestion. The blood count and iron content became normal and there was no increase in the bacterial count. Other clinical parameters did not change, but skin lesions healed more rapidly than when treated with dapsone alone.

Before treatment all patients manifested swelling of joints, generalized pruritus, nasal congestion, abnormal blood counts, and skin lesions ranging from mild to severe.

Dr. Garcia did not discount the possibility of reinfection after two years. He suggested that another study be done over a period of not less than five years.

## Yemeni-Born MDs on Increase

Medical Tribune World Service

TAIZ, YEMEN—The number of native-born doctors in Yemen has risen from two to 79 in the past 10 years, according to a World Health Organization report. Nurses and midwives have increased from 16 to 88.

## India May Open School to Teach Traditional Medical Practice

Medical Tribune World Service

NEW DELHI—The Indian Government is considering a proposal to set up a medical school specializing in the practice of Indian traditional medicine.

Religious orders have already pledged to meet part of the cost of such a school, Health Minister K. Ambedkar told the Legislative Assembly. Increasing demands made on the medical profession in India, he explained, mean that the Western system of medicine alone is not sufficient.

"It is up to the people to take advantage of the possibilities held forth by the indigenous system of medicine," Mr. Ambedkar said. "Practitioners of the Western system have to shed some of their hostility to the indigenous systems and encourage their growth by scientific study."

Indigenous medicine in India emphasizes the use of herbs. In rural areas it still provides the basis for much medical treatment.

## Polio's Incidence Now at Minimum In Many Nations

Medical Tribune Report

ATLANTA, GA.—The incidence of poliomyelitis has fallen to "insignificant proportions" in Europe, North America, Australia, New Zealand, and a few other countries, including the Soviet Union, the Center for Disease Control reported here.

The same trend is observed in a group of countries in Asia and in Central and South America where adequate vaccination programs have been implemented, the CDC said. Throughout much of Africa and Asia, however, a definite increase in polio has been seen.

In most countries in Central and South America, the polio situation may be characterized as "unstable" and "disquieting." Further positive changes in this part of the world depend greatly on efforts to organize vaccination programs.

Poliomyelitis type 1 is still responsible for the majority of cases in those countries with endemic disease or frequent outbreaks, the CDC noted.

Tropical and subtropical countries with a rising level of community and personal hygiene may expect increasing numbers of paralytic poliomyelitis cases. Large outbreaks, such as those occurring in the temperate countries before polio vaccines were available, should be anticipated.

The CDC report was based on notifications of the occurrence of polio received by the World Health Organization through weekly, monthly, or annual summaries submitted by health administrations.

"It must be borne in mind, however, that reporting both on the national as well as the international level is frequently incomplete," the CDC said. "Furthermore, for 1969 and 1970 the data are in many instances provisional, including only a portion of the indicated calendar year."

### Slight Rise Noted in U.S.

A slight rise in the number of cases between 1969 and 1970—from 18 to 30 cases—in the United States was recorded. "The increase, though small, is being carefully watched," the CDC said. "Attention has been drawn to the fact that there has been a steady decline in the proportion of children completely immunized against polio from 1964 to 1971. Pockets of susceptible children are known to be developing in many of the larger inner-city areas."

The combined data from the American region indicate that in most countries the polio situation "is not yet under effective control."

In the European region, 10 countries out of 22 reporting for 1970 had no cases and an additional five countries notified three cases or fewer. In the Soviet Union, in 1958, 22,054 polio cases were registered. There were for the individual years 1966 to 1969 only 300, 290, 120, and 190 cases, respectively.

In the Southeast Asian region, the overall epidemiologic situation in 1970 is obscured by the absence of data from such countries as India and Indonesia.

In the African region, the total number of cases for 1970 is unusually low, but this is largely because half the countries have either not reported or submitted incomplete data.

## Brain Aneurysms Are Closed With Injected Iron Particles

Medical Tribune Report

BETHESDA, Md.—Injected iron particles, held in place with magnets, can successfully close brain aneurysms, according to a Virginia scientist working on a project funded by the National Institutes of Health.

Five years' experience with a novel approach to the problem of cerebral aneurysms has been reported by Dr. John F. Alksne, at the Medical College of Virginia.

The approach entails use of a tube-shaped magnetic probe through which a needle for injecting powdered iron into the aneurysm is passed. The probe, which is put through a burr hole in the skull and moved into a position abutting the aneurysm, holds the iron particles in place for three to five days while a clot forms around them. Eventually, Dr. Alksne said, the clot and aneurysm are replaced with scar tissue.

Experience varied depending on condition of the patients and location of the aneurysm. But in one group of 15 patients

who were conscious and without major neurologic deficit at the time of surgery, and whose aneurysms were on the anterior communicating artery, results were considered "very encouraging." Ten of the 15 returned to work.

Results for 12 patients whose aneurysms were on the internal carotid artery were not so promising: only four of the eight survivors have returned to work, the others being disabled by emboli caused by escaping iron. The poorer results were attributed to larger size (greater than 1 cm.) of the aneurysms and larger necks, which allowed portions of the developing thrombus to wash out into the circulation.

### Good Results Called Noteworthy

Dr. Alksne said, however, that the good results with aneurysms of the anterior-cerebral-anterior-communicating region are considered noteworthy because these lesions carry such a high operative morbidity and mortality when treated conventionally. The stereotactic probe technique, Dr. Alksne noted, avoids the vasospasm, irritation of cerebral blood vessels, and edema that often follow conventional surgery.

Dr. Alksne and his associates feel that they can reduce mortality and morbidity through several improvements of the technique, including better x-ray monitoring, which will allow the iron injection to be stopped before any thrombus extends into the feeding artery, and better design of the magnetic probe to reduce the possibility of dislodgment.



Injected iron particles, held in place with magnets, have been successfully used to close brain aneurysms, says Dr. Alksne (above, with electromagnet). A clot forms around particles; eventually scar tissue replaces the aneurysm and clot. Research is supported by a grant from the NIH.

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**BRISTOL MYCIN**  
(ERYTHROMYCIN STEARATE)

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Bristol quality at economy prices

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### Pediatrics (1,2,17,27)

About 15 per cent of Americans 12 to 17 have smoked marijuana.

CLINICAL NEWS NOTE: "If neck injury is strongly suspected but cannot be immediately diagnosed by standard techniques, the patient should be protected by head rest, traction, a collar...." (Dr. J. William Fielding; see page 29.)

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Anxiety—frequent cause of gastrointestinal complaints or concomitant of gastrointestinal symptoms. Gastrointestinal complaints may be signals of functional gastrointestinal disorder or of organic gastrointestinal disease. In either case, severe anxiety frequently plays a prominent role in causing functional complaints or in complicating organic disease. Whenever excessive anxiety is a significant component of the clinical profile, adjunctive use of Librium® (chlordiazepoxide HCl) may be of value.

# his gastrointestinal complaints are as real as

Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

**Contraindications:** Patients with known hypersensitivity to this drug.

**Warnings:** Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations

requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against

its possible hazards. **Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage. (Initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothi-

azines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship

not been established clinically. **Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally

controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy. **Supplied:** Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl.

ROCHE Roche Laboratories Division of Hoffmann-La Roche Inc. Nutley, N.J. 07110

For relief of moderate to severe anxiety associated with gastrointestinal complaints and symptoms adjunctive

## Librium 10 mg (chlordiazepoxide HCl)

1 or 2 capsules  
t.i.d./q.i.d.

The duodenal bulb shows evidence of spasm and constriction at its waist, with a one-centimeter ulcer projecting superiorly from its base.

This patient complains of the same symptoms—bloating, sour stomach and nausea. He thinks he may have an ulcer, and thorough examination plus x-rays point to his high level of anxiety.

## Disodium Cromoglycate Found Useful in Treatment of Asthma

**Medical Tribune World Service**  
STOCKHOLM—Favorable experience with the use of disodium cromoglycate in the treatment of asthma was reported by several Scandinavian investigators at the 10th Nordic Congress in Allergy here. The product is now registered in all Scandinavian countries except Sweden.

Dr. Knud Wilken-Jensen, of the children's allergy clinic of Copenhagen's Rigshospital, described results in 56 patients under 15 years of age and 39 over 15. Improvement brought on by disodium cromoglycate was noted in 82 per cent of the patients—84 per cent of those under 15 and 70.5 per cent of those over.

Appraisal of effectiveness was based on daily well-being and dosage schedules maintained by the patients themselves, on questionnaires, and on clinical consultation.

Dr. Wilken-Jensen said that disodium

cromoglycate is an especially valuable aid in the symptomatic treatment of bronchial asthma. Attacks are fewer and milder, he said, and use of substances with undesirable side effects is reduced. Moreover, he said, the drug permits a more intensive hyposensitization, which, in the longer run, can bring the desired freedom from symptoms.

### 24 Asthmatic Children Treated With Disodium Cromoglycate

*From Helsinki*

Dr. Alf Backman, of the Pediatric Clinic, Helsinki, reported treating 24 asthmatic children (18 boys and six girls), averaging 10.5 years of age, with disodium cromoglycate.

Most important criteria were severe intrinsic asthma in which treatment with standard drugs had proved unsatisfactory. Half the patients were treated for about six

months. Only six of the patients received the substance continually for longer than one year.

Work capacity determination, spirometry, self-recording of symptoms, and changes in height and weight during the treatment period all indicated a clear change for the better in the patients' conditions, Dr. Backman reported. No toxic side effects were noted.

He said the disodium cromoglycate therapy should be used mainly for patients with severe extrinsic asthma in which no results have been obtained with normal hyposensitization. Temporary use of the drug is indicated, too, he said, in cases in which hyposensitization can not be carried out because of an imminent pollen season. Another indication is asthma triggered by physical exertion.

"In patients with so-called infectious asthma type, where no other extrinsic fac-

tor than infection can be demonstrated, the effect of disodium cromoglycate is so pronounced," the physician commented.

But since good results have been reported among such patients, the preparation can well be tried even here when other substances have failed to help, he said.

### 38 Children Treated Nasally For Birch-Pollen Allergy

*From Karolinska Hospital*

Results of a double-blind investigation on a group of 38 children with verified birch-pollen allergy to determine the effect of nasal application of disodium cromoglycate in allergic rhinoconjunctivitis were reported by Dr. Ejvor Oherger, who is with the pediatric clinic of Karolinska Hospital here.

She noted a significant decrease in nasal symptoms during the peak pollen period among the group treated with disodium cromoglycate but no effect on eye symptoms.

Wednesday, October 6, 1971

## Broader Representation Is Suggested For Hospital Group's Trustee Board

*Medical Tribune Report*

CHICAGO—The man who led a year-long study for the American Hospital Association to produce its national health care proposal warned the organization it has "an important weakness, which substantially reduces its political clout."

The chief in A.H.A. influence, Earl Perloff told the annual convention here, is that "by and large it speaks only for hospital administrators...not for physicians or for hospital trustees."

Mr. Perloff, chairman of the board of the Albert Einstein Medical Center in Philadelphia, suggested a remedy: add six practicing physicians and six hospital trustees to the A.H.A. board of trustees. He also thinks a similar addition should be made to the A.H.A. House of Delegates, the regional advisory boards, the councils, and the state associations.

"I believe that the A.H.A. would be a

far greater force for change if it did represent these two groups," physicians and hospital trustees as well as hospital administrators.

Mr. Perloff was chairman of the study committee that produced the blueprint for the A.H.A. "Ameriplan" scheduled to be introduced in Congress later this year as yet another entry in the legislative race to restructure the nation's health care delivery methods.

He implied, however, that the organization's leverage to get its health care proposals considered on an equal footing with, for instance, those of the Nixon Administration, the American Medical Association, or the Kennedy-Jahar forces might be reduced because of the A.H.A. narrowness of representation. "I feel a great affinity for the A.H.A.," Mr. Perloff said, "and I am most anxious to see it remain an effective vehicle for the improve-

ment of the health care system of the United States."

Mr. Perloff said he was suggesting an expansion of the A.H.A. board to accommodate physicians and hospital trustees. With six of each added, the board would total 36 members. An A.H.A. spokesman said none of the 24 members are practicing physicians or hospital trustees.

Only two are M.D.s—Dr. Martin R. Steinhilber, executive head of Mount Sinai Hospital in New York, and Lieut. Gen. Alonzo A. Towner, of the U.S. Air Force.

The A.H.A. president-elect, Stephen M. Morris, president of Good Samaritan Hospital in Phoenix, Ariz., told a news conference that the organization "has made efforts—it's a trend and you'll see more of it—to bring more physicians into the boards and councils."

Another A.H.A. official was not sanguine about the chances of getting hospital trustees into A.H.A. work. "Earl Perloff is not typical," the official said. "Most hospital trustees are businessmen with hospital interests that are local, not national."

## Tumor Link Under Study



Relationship between estrone and endometrium tumors is under scrutiny by Penell Sileri, Ph.D., at University of Texas Southwestern Medical School at Dallas. Above, Dr. Sileri examines test tube of radioactive estradiol. Study is supported by American Cancer Society.

We'd like you to form an opinion of the clinical and bacteriological experience with 377 patients in the treatment of staph and strep soft-tissue infections\* with clindamycin HCl

In our opinion, this clinical and bacteriological work points to Cleocin HCl (clindamycin HCl hydrate, Upjohn) as a drug with potential value in the treatment of staph and strep soft-tissue infections. If you share this opinion, we'd

appreciate knowing about it. And one good way of letting us know would be to ask your Upjohn representative for samples and/or additional information. Cleocin should be prescribed with caution in atopic individuals.



**Cleocin<sup>®</sup> HCl**  
clindamycin HCl hydrate, Upjohn

\*Due to susceptible organisms.

It takes a few minutes to review.

Clinical and bacteriologic responses of patients with skin and soft tissue infections treated by 55 investigators with Cleocin HCl (clindamycin HCl hydrate, Upjohn)\*

Infection	No. of Patients	Pathogens	Clinical Response		Bacteriologic Response	
			Excel. or Good (%)	Poor (%)	No. of Pts. Evaluable	Organisms Eradicated (%)
Abscesses, wounds, & furuncles	156	S. aureus - 107 staph, other- 12 β-strep - 10	151 (97%)	5 (3%)	129	126 (98%)
Cellulitis	38	S. aureus - 21 staph, other- 1 β-strep - 8	38 (100%)	—	30	30 (100%)
Superficial skin & soft tissue—mostly impetigo	183	S. aureus - 41 Mixed β-strep & staph - 61 staph, other- 1 β-strep (74 Group A) - 81	178 (97%)	5 (3%)	174	170 (98%)
Total	377	—	367 (97%)	10 (3%)	333	326 (98%)

\*Data on file, Medical Research Files, The Upjohn Company

Note: With β-hemolytic streptococcal infections, treatment should continue for at least 10 days to diminish the likelihood of subsequent rheumatic fever or glomerulonephritis.

Some strains of staphylococcus resistant to clindamycin HCl have been recovered. Therefore, as with all antibiotics, *in vitro* susceptibility studies should be performed.

97-100% of patients with susceptible skin and soft-tissue infections (staph and strep) had excellent to good response with clindamycin HCl.

Each preparation contains:

Cleocin HCl (clindamycin HCl hydrate) is a new semisynthetic antibiotic produced from the parent compound lincomycin and provides more *in vitro* potency, better oral absorption and fewer gastrointestinal side effects than the parent compound.

Cleocin HCl (clindamycin HCl hydrate) is indicated in infections of the upper and lower respiratory tract, skin and soft tissue, and, adjunctively, dental infections caused by gram-positive organisms which are susceptible to its action, particularly streptococci, pneumococci and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

CONTRAINDICATIONS: Patients previously found to be hypersensitive to this compound or to lincomycin.

WARNINGS: Safety for use in pregnancy not established. Not indicated in the newborn (infants below 30 days of age).

PRECAUTIONS: Prescribe with caution in atopic individuals. Perform periodic liver function tests and blood counts during prolonged therapy. The serum half-life in patients with markedly reduced renal function is approximately twice that in normal patients; hemodialysis and peritoneal dialysis do not effectively

remove Cleocin from the blood. Therefore, with severe renal insufficiency, determine serum levels of clindamycin periodically and decrease the dose appropriately. Should overgrowth of non-susceptible organisms—particularly yeasts—occur, take appropriate clinically indicated measures.

ADVERSE REACTIONS: Generally well tolerated in clinical efficacy studies. Side effects reported in 8.2% of 1,416 patients. Of the total, 6.9% reported gastrointestinal side effects and 1.3% reported other side effects. Nausea or loose stools were reported in 3%. Gastrointestinal symptoms included abdominal pain, nausea, vomiting and diarrhea or loose stools. In a few instances, diarrhea lasted for several days; one case of bloody stools was reported. Hematopoietic Transient neutropenia (leukopenia) and eosinophilia have been reported; relationship to therapy is unknown. No irreversible hematologic toxicity has been reported. Skin and Mucous Membranes: Skin rash and urticaria have been reported infrequently. Hypersensitivity Reactions: A few cases of hypersensitivity reaction have been reported. If hypersensitivity occurs, discontinue drug and have available the usual agents (epinephrine, corticosteroids, antihistamines) for emergency treatment. Liver: Although no direct relationship of Cleocin HCl (clindamycin HCl hydrate) to liver dysfunction has been noted and significance of such change is unknown, transient abnormalities in liver function tests (ele-

vations of alkaline phosphatase and serum transaminases) have been observed in a few instances. Also, abnormal liver function test values at the beginning of therapy have returned to normal during therapy.

DOSEAGE AND ADMINISTRATION: Adults: Mild to moderately severe infections—150 to 300 mg. every 6 hours. Severe infections—300 to 450 mg. every 6 hours.

Children: Mild to moderately severe infections—8 to 16 mg./kg./day (4 to 8 mg./lb./day) divided into three or four equal doses. Severe infections—16 to 20 mg./kg./day (8 to 10 mg./lb./day) divided into three or four equal doses.

Note: With β-hemolytic streptococcal infections, treatment should continue for at least 10 days to diminish the likelihood of subsequent rheumatic fever or glomerulonephritis.

SUPPLIED: 150 mg. Capsules—Bottles of 16's and 100's. 75 mg. Capsules—Bottles of 16's and 100's. Sensitivity Disk: 2 µg. Sensitivity Powder—Vials.

For additional product information, see your Upjohn representative or consult package insert, MED 8-4-S (LNU-3) J471-1446

The Upjohn Company, Kalamazoo, Michigan 49001

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**Upjohn**



One to two hours before surgery, 10 mg Injectable Valium (diazepam) I.M.

can promptly calm, lessening anxiety and tension associated with strange



surroundings and disturbing procedures. Perhaps best of all, Injectable

Valium (diazepam) markedly diminishes recall of the preoperative procedure.

### Premedication for surgery

Injectable Valium (diazepam) is a useful premedicant for reducing undue anxiety. Recall of preoperative procedures is markedly diminished. When given in conjunction with narcotics, a reduction of narcotic dosage should be considered. (See summary of prescribing information.) Injectable Valium should not be mixed with other drugs, solutions, or fluids. The new 10-mg disposable syringe can help you observe this precaution at the same time it helps assure aseptic handling. Injectable Valium seldom significantly alters vital signs. Nevertheless, there have been infrequent reports of hypotension and rare reports of apnea and cardiac arrest, usually following I. V. administration. Resuscitative facilities should be available.

To relieve excessive preoperative anxiety, remember Injectable Valium (5 mg/ml) 2-ml ampul, 10-ml vial, 2-ml disposable syringe.

Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinations due to acute alcohol withdrawal; adjunctively in: relief of skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; tetanus; status epilepticus and severe recurrent seizures; anxiety

prior to gastroscopy, esophagoscopy, and surgical procedures; cardioversion (I.V.).

**Contraindications:** In infants; in patients with known hypersensitivity to the drug; in acute narrow angle glaucoma; may be used in patients with open angle glaucoma receiving appropriate therapy.

**Warnings:** Inject I.V. slowly, directly into vein; take at least one minute for each 5 mg (1 ml) given. Do not mix or dilute with other solutions or drugs. Do not add to I.V. fluids. Rare reports of apnea or cardiac arrest noted, usually following I.V. administration, especially in elderly or very ill and those with limited pulmonary reserve; duration is brief; resuscitative facilities should be

available. Not recommended as sole treatment for psychotic or severely depressed patients. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs. Caution against hazardous occupations requiring complete mental alertness. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy,

lactation or women of childbearing age, weigh potential benefit against possible hazard to mother and child.

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium, such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Not recommended for bronchoscopy, laryngoscopy, obstetrical use, or in diagnostic procedures other than

gastroscopy and esophagoscopy. Laryngospasm and increased cough reflex are possible during gastroscopy; necessary countermeasures should be available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Since effect with narcotics may be additive, appropriate reduction in narcotic dosage is possible. Use lower doses (2 to 5 mg) for elderly and debilitated. Safety and efficacy in children under 12 not established.

**Side Effects:** Drowsiness, fatigue, ataxia, confusion, depression, constipation, dysarthria, diplopia, headache, hypoactivity, hiccups, hypotension, incontinence, jaundice, nausea, changes

in libido, changes in salivation, phlebitis at injection site, urinary retention, skin rash, syncope, slurred speech, urticaria, tremor, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported; should these occur, use of the drug should be discontinued. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy. Minor EEG changes, usually low-voltage fast activity, of no known significance.



Roche Laboratories  
Division of Hoffmann-La Roche Inc.  
Nutley, N.J. 07110

# Injectable Valium® (diazepam)

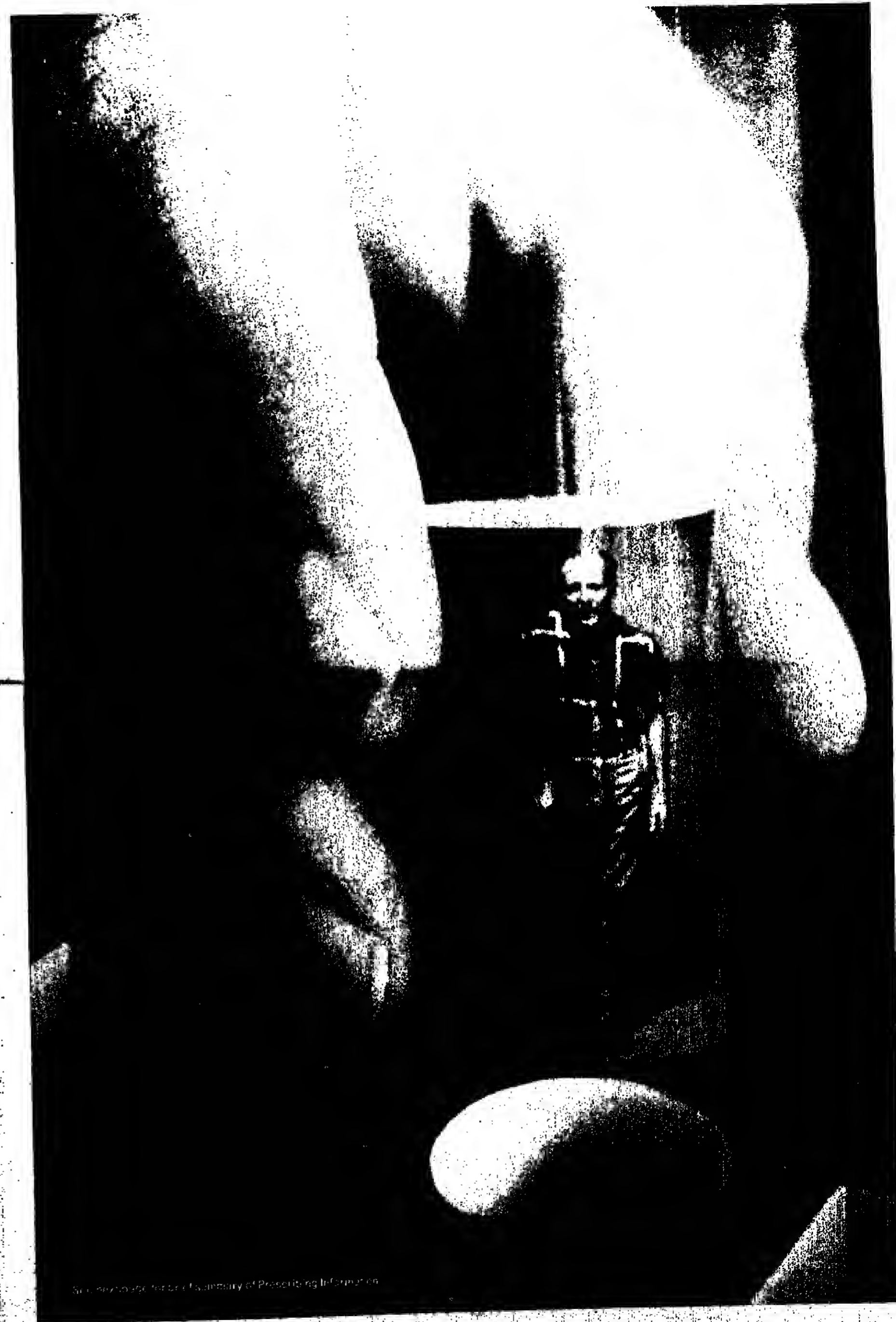
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## When analgesia is needed for a long period

- Comparable to codeine in analgesic efficacy: one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine.
- Prolonged analgesia between doses: relieves pain usually for 3 hours or longer. Onset of significant analgesia usually occurs within 15 to 30 minutes.
- Tolerance to the analgesic effect of Talwin Tablets has not been observed and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- Infrequently causes decrease in blood pressure or tachycardia; rarely causes respiratory depression or urinary retention; seldom causes diarrhea or constipation.
- Generally well tolerated by most patients: If dizziness, lightheadedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See Product Information following for full discussion of all adverse reactions and other prescribing information.)
- Not subject to narcotic controls; convenient to prescribe—day or night.

# A time for Talwin® brand of pentazocine (as hydrochloride) 50mg. Tablets



See package insert for complete prescribing information.

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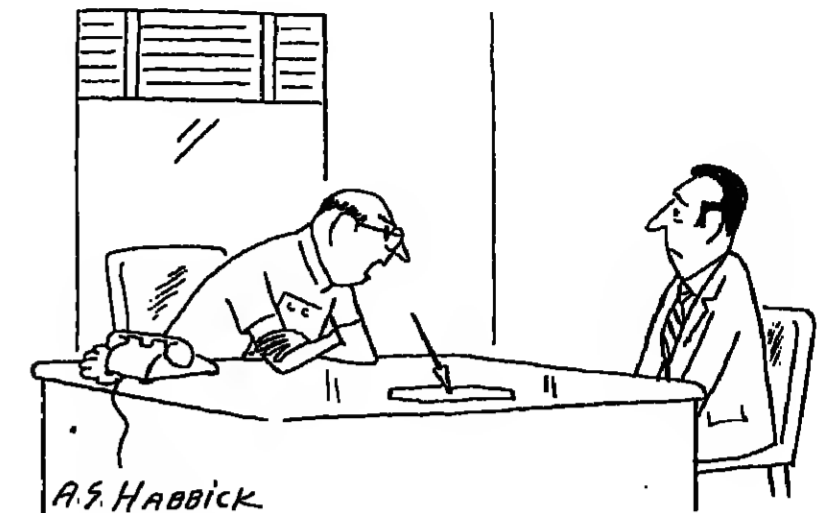
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"Don't burn your candle at all. Forget you have one."

moderate to severe pain

## A time for Talwin

brand of  
pentazocine 50mg. Tablets  
(as hydrochloride)

**Contraindications:** Talwin should not be administered to patients who are hypersensitive to it.

**Warnings:** Head Injury and Increased Intracranial Pressure. The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a preexisting increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

**Usage in Pregnancy.** Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

**Drug Dependence.** There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain. **Acute CNS Manifestations.** Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

**Use in Children.** Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

**Ambulatory Patients.** Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

**Precautions: Certain Respiratory Conditions.** Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

**Impaired Renal or Hepatic Function.** Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accumulation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

**Myocardial Infarction.** As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.



**Biliary Surgery.** Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

**Patients Receiving Narcotics.** Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

**CNS Effects.** Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no causal or effect relationship has been established.

**Adverse Reactions:** Reactions reported after oral administration of Talwin include gastrointestinal: nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea.

**CNS effects:** dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. **Autonomic:** sweating; infrequently flushing; and rarely chills. **Allergic:** Infrequently rash; and rarely urticaria. **Cardiovascular:** Infrequently decrease in blood pressure, tachycardia. **Other:** rarely respiratory depression, urinary retention.

**Dosage and Administration: Adults.** The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antipyretic or analgesic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin. **Children Under 12 Years of Age.** Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

**Duration of Therapy.** Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

**Overdosage: Manifestations.** Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

**Treatment.** Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are not effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan), available through Endo Laboratories, is a specific and effective antagonist. If naloxone is not available, parenteral administration of the anesthetic, methyphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

**How Supplied:** Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10018

## Physical Diagnosis Revisited

PHYSICAL DIAGNOSIS, like motherhood, is sacrosanct but is honored in the breach more than in performance. Fledgling physicians soon become weaned from their early lessons in use of the unaided senses with the allure of intriguing diagnostic gadgetry. Seasoned practitioners, too, often all but abandon physical diagnosis for convenient laboratory tests. It is refreshing therefore to see some of the newest of sophisticated procedures serve to validate the accuracy and usefulness of the oldest of diagnostic techniques—i.e., palpation of the heart's impulse.

As reported in the August issue of the *Annals of Internal Medicine*, Drs. Robert D. Conn and James S. Cole, of the University of Washington, Seattle, have correlated the bedside features of the cardiac apex-impulse with fiberoptic apexcardiography and biplane angiographic determinations of left-ventricular volume and mass. They found that 88 per cent of patients with a sustained holosystolic impulse had an increased left-ventricular mass and that "the bedside characteristics of the apex impulse more accurately predicted left ventricular hypertrophy than did the electrocardiogram or the chest roentgenogram."

The observations of Drs. Conn and Cole

are of interest in that they restate what was so well described by Dr. Thomas Watson in his classic text, dated 1858, *Principles and Practice of Physic*. "There is no sign of hypertrophy so sure as that afforded by the heart's impulse. You feel, not a smart, quick and sudden knock, but a steady, heaving, irrepressible swell, which is perfectly characteristic. You may always infer increased thickness of the walls of the organ, when you meet with this regular heaving motion, and the extent to which the whole heart is enlarged in such cases may be conjectured by the extent of space over which the heaving impulse is perceptible."

It is customary to estimate the presence or absence of cardiac enlargement by the location of the apical impulse in relation to the midclavicular line. Drs. Conn and Cole stress that the location of the apex impulse provides less precise information regarding left-ventricular hypertrophy or dilation than does the size or duration of the impulse and that an impulse occupying two or more rib interspaces particularly signifies increased muscle mass.

The question How do you feel? ought to apply not only to the patient but also to the doctor, and the proper answer is: With one's fingers.

## Right Hand and Left Hand

WHEN PRESIDENT NIXON APPEARED ON television to announce the steps he was taking to cope with our economic crises, he made specific reference to all of us who "are among the majority who buy American-made products in America." The recent monetary crunch in the United States came as no surprise. For years a growing schizophrenia between American interests and American policies has been evident in different departments of the Federal Government.

One of our major exports and the source of favorable foreign currency balance has been the fruit of American technology. But when it comes to drugs, the facts of life and logic have been simply brushed aside with blind prejudices. The U.S. Government has disregarded—and continues to do so—only valid U.S. drug patents but also the wage scales and jobs

of American workers in the U.S. pharmaceutical-chemical establishment. The excuse proffered has been that foreign drugs could be bought by governmental agencies at lower prices. But the money saved was penny ante compared to the hundreds of millions of dollars that could have been saved had our armed forces bought uniforms in Hong Kong, vehicles in Japan, and freighters in Italy.

MEDICAL TRIBUNE favors fair drug prices here and abroad but questions whether these should lead to reduced research, loss of taxes, elimination of American jobs, and discrimination against American institutions. We believe that physicians and patients would not want to incur such a penalty if all the facts were presented to them. But logic and consistency do not rule and the right hand is often unaware of what the left hand is doing.

## Urologic Diagnosis for Abdominal Masses

CLINICAL QUOTE: "The diagnostic dilemma presented by abdominal masses in children often engenders a sense of urgency that can provoke hasty and incomplete study of the patient. It must be publicized that the majority of these masses arise from the genitourinary tract and that complete urologic evaluation is needed to avoid misdiagnosis or precipitous exploratory surgery and its attendant

hazards. There are relatively few instances when a brief interval of additional urologic study cannot confirm or exclude a genitourinary derivation of a mass and thereby obviate unfortunate situations that can be engendered by exploratory coeliotomy." (Drs. R. Mark Kirk and Jan M. Thompson, University of Missouri School of Medicine; see story page 27.)

## Eagles Into Chickens

Editor, MEDICAL TRIBUNE:

Wisconsin physicians continuing restrictive policy regarding abortions. Distrust Federal Court's recent action nullifying state's abortion law. . . . News item.

One is reminded of a little parable about eagles, herein slightly modified:

Once upon a time some baby eagles, fallen from their nest, were captured by a man who took them home and had them "live in" with his chickens, each one with its wings tied together. They all became used to being "chickens."

One day the man decided to grant his eagles their freedom. He took each one, untied its wings and said, "Go ahead and fly," but the eagles were afraid to try it. "Our wings might not be equal to that," they said. "Besides, what if someone decides next week to tie our wings up again?"

To be continued. . . . (When will the eagles recognize their new freedom and start using it? How long will they continue in their role as chickens? Watch for more chapters of this fascinating story.)

H. B. MUNSON, M.D.  
Rapid City, S.D.

increasing bladder capacity. And if suggestion were so effective, would we now be discussing enuresis?

Dr. Gillette regards me as "off base" for indicating that authors do not support theories of unmyelinated nerve fibers, etc., with histopathological slides, etc., because "few would deny" the existence of hysteria, depression, and schizophrenia, though these conditions cannot be demonstrated histopathologically.

Have any authors theorized, as they have for enuresis, that those diseases are due to unmyelinated nerve fibers, immature cerebral centers, or cord lesions? If they have, positive histopathological evidence would greatly strengthen their case.

SAMUEL J. ARNOLO, M.D.  
Morristown, N.J.

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## Hospitals and Mercury

Editor, MEDICAL TRIBUNE:

Your recent article on mercury pollution was informative but made no mention of the problem as it relates to health professionals and to hospitals. Mercury poisoning is an occupational hazard of dental personnel. Furthermore, hospitals dump large quantities of mercury into the sewerage system each year.

The American Hospital Association has recently warned its members of this problem. Mercury chloride, used in the preparation of Zenker's fixative, is the mercury compound most commonly discarded in the sewerage. The A.H.A. noted that about 50 pounds of HgCl<sub>2</sub> could be discarded with waste Zenker's per large medical facility per year.

In a survey we have recently begun, we found one institution that poured 80 pounds of mercuric chloride into the sewerage each year. For this reason, we are undertaking OPERATION MERCURY to eliminate this source of contamination. Fuller details, along with a method of safely and inexpensively removing mercuric chloride from Zenker's solution, will appear this September in *Young Doctors' Forum*, the newsletter of the Coordinating Committee for a Second National House Staff Conference. Copies of YDF will be sent to the libraries of teaching hospitals or may be obtained from the Institute for the Study of Health and Society, 1030 Potomac Street, N.W., Washington, D.C., 20008.

ANTHONY BOTTONE, M.D.  
San Francisco, Calif.



Flying will allow interns and residents "to visit rural medical operations and experience different types of health problems and emergencies than they would normally encounter," says Dr. Pettit. Above he checks the engine of his plane before flying.

## Flight Program Instituted to Give Rural Physicians Greater Mobility Omaha-Based Project Offers a Chance In Flying to Ease Doctor Shortage

TAKING THE HIGHWAY to work will mean something else to 11 interns who receive flight training in a new project at Creighton Memorial Saint Joseph's Hospital in Omaha.

Organized by Dr. Michael Haller, head of the family practice program, the project's objective is to steer more physicians toward practicing in rural areas. "A rural physician is more dependent on medical meetings, continuing education short courses. If he can fly, he is more apt to take part in these," says Haller. Increased mobility will also help break down the sense of isolation that confronts practitioners and their families in sparsely populated regions. This voluntary flight program is open to all interns and residents at the hospital.

Program participant Dr. Fred Pettit emphasized other benefits. "These physicians could provide temporary assistance to communities where there is a serious medical personnel or where the local physician becomes ill," Dr. Pettit, who completed his family practice residency, added that these physicians would be able to bring their own patients to better-equipped facilities or bring in emergency cases.



"It helps to know I have this type of freedom," says Dr. John Ford, who intends to practice in Nebraska, Montana, or Alaska. Above, he inspects an aircraft.



First of the interns in this year's class to receive his license, Dr. Pettit (r.) discusses instrumentation with Dunne Toelle, flight instructor.



Technique of utilizing a cryostat to prepare very thin tissue sections is demonstrated to a number of the students at the Lausanne Center.

## WHO Centers Training Immunologists To Confront Problems in Own Nation

INTERNATIONAL RESEARCH AND TRAINING CENTERS of WHO seek to nurture a nucleus of immunologists who will solve medical problems peculiar to their countries. Some centers, such as the one at Lausanne, Switzerland, give advanced training. Last year, one course there was attended by 14 physicians from 14 countries all over the world. Other Lausanne projects include studies of relationship between cellular immunity and leishmaniasis and research into gastrointestinal tract "local immunity." It functions also as an immunoglobulin reference center. IRTCs are located in Ibadan (Nigeria), São Paulo, Mexico City, Singapore, Beirut, New Delhi, Rehovoth (Israel), and Basel.



**Transfer:** Oral electrolyte-glucose solution developed for treatment of Asiatic cholera is used by NIAMD and Johns Hopkins U. School of Medicine physicians to treat diarrhea epidemics among Apache children in Arizona. (Left to right) Dr. Richard Cash, Lots Evans, R.N., Twila Pallizote, nursing trainee, and Dr. Norbert Hirschhorn are shown in the diarrhea ward at Whitcreek Hospital.



World Health Organization fellows, participating in a three-week course in basic and applied immunology, listen to a lecture being given by Dr. David Rowe.



Renal tumor from first patient consists of numerous masses of round cells found to be arranged in a mixed papillary and tubular mode.



DR. MURPHY



DR. PALMA



DR. KENNY

## Cases of Renal Cell Carcinoma Seen in 2 Children in 6 Months

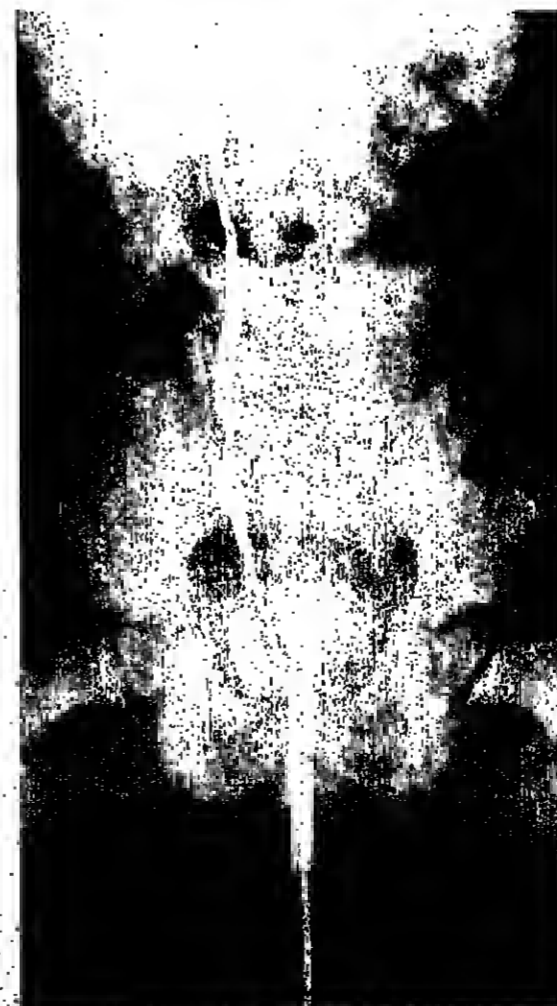
TWO CHILDREN with renal cell carcinoma have been seen in less than six months by Drs. L. D. Palma, G. M. Kenny, and G. P. Murphy, from the Urology Department, Roswell Park Memorial Institute and State University of New York at Buffalo.

The first patient was a girl, first seen at age five and a half months because of abdominal mass found during routine exam. Surgical exploration revealed extensive retroperitoneal tumor, diagnosed as teratoma. Chemotherapy and radiotherapy resulted in its apparent regression. Later, extensive excision of the tumor was accomplished. Two and a half years later, she returned with gross painless hematuria. Studies showed a mass at right midpoint of kidney. Entire organ, with tumor, was removed (see photo, right). Follow-up has shown no evidence of recurrent disease.

A 12-year-old girl was admitted with complaints of weight loss, vomiting, and pain in lumbar area. A large abdominal mass with metastases to bone marrow, liver, and lungs was discovered. An exploratory laparotomy, after chemotherapy with radiotherapy, was done, then nephrectomy. Histologic studies indicated clear-cell renal carcinoma.



Cut section of first patient, reveals mass with large clot 3 by 2 cm. Retrograde pyelogram, right, shows defect at renal pelvis.



**Hmmm:** At special luncheon with menu consisting entirely of non-cholesterol foods, Dr. Rodney Culler, cardiology fellow at University of Alabama in Birmingham, samples "meat loaf." All "meats" at this meal—hot dogs, chicken, sausage—were derived from soybean products. The purpose of the meal was to demonstrate to participating physicians that rigorous, noncholesterol diets can be tasty, even delicious.

# Duodenal ulcer

badge of success or penalty of failure?

The hard-driving executive who proudly displays his duodenal ulcer as a "badge of success" is an image that may be as inaccurate as it is overused.

His ulcer may well be a mark of failure. A penalty the patient pays for failing to resolve the anxiety-producing conflict between expectations and accomplishment. Indeed, the "ulcer patient" has been described as one who isn't easily satisfied, "whether he governs an industrial empire or combs a beach."\*

The psychic stress of undue anxiety may be a part of the cause and may help influence the course of duodenal ulcer, which is why Librax\* with its dual action



can be a helpful adjunct in the treatment and eventual management of the ulcer patient.

Librax combines in a single capsule the well-known antianxiety action of Librium® (chlordiazepoxide HCl) and the potent, dependable antisecretory/antispasmodic action of Quarzan® (clidinium Br).

Since Librax, on recommended dosage, generally does not unduly interfere with mental acuity or ability to function, it is usually well adapted for the majority of patients.

In the management of duodenal ulcer, make Librax part of the program your patient responds to best.

\*Palmer, E. D., *Clinical Gastroenterology*, New York, Hoeber Medical Division, Harper & Row, 1963, p. 206.

Before prescribing, please consult complete product information, a summary of which follows:  
Indications: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

Contraindications: Patients with glaucoma, prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide hydrochloride and/or clidinium bromide.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering Librium (chlordiazepoxide hydrochloride) to known addiction-prone individuals or those who might increase dosage without withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Precautions: In elderly and debilitated, limit dosage to smallest effective amount to preclude development of ataxia, oversedation or confusion (not more than two capsules per day initially; increase gradually as needed and tolerated). Though generally not recommended, if

combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients. Employ usual precautions in treatment of anxiety states with evidence of impending

in the treatment  
of duodenal ulcer  
adjunctive  
**Librax**

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

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Roche Laboratories  
Division of Hoffmann-La Roche Inc.  
Nutley, N.J. 07110

depression, suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions; edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other antispasmodics and/or low residue diets.

## Clinical Trials



## Five New Tests Offer Diagnosis Of Hemoglobin S

Continued from page 1

Institutes of Health. Dr. Murnyamo's research also laid the groundwork for the team's development of the initial specific test for the diagnosis of the disease, the Murayama test, in which a deoxygenated sample of the patient's blood is placed in a 37° C. environment and then quickly cooled to 0° C. The sample will gel at 37° C and liquefy at 0° if it contains hemoglobin S.

The first of the new tests is a simplification of the Murayama test technique. Because of the time required, it is not suitable for mass screenings, Dr. Wolf said.

"We've modified the test by using moist nitrogen to remove oxygen from the blood sample, instead of dry ice," he said. "This speeds up the process to about 20 minutes." Originally, it took one hour.

The four other tests—dithionite tube test, urea-dithionite tube test, ood automated adaptations of the two—utilize a solution containing dithionite to test for sickling hemoglobin. The chemical reagents in all four are potassium phosphate, sodium dithionite (sodium hydrosulfite), and saponin (snake venom). When a blood sample containing sickling hemoglobin is introduced into the solution, the system will become turbid.

This screening procedure for sickling hemoglobin takes less than five minutes in the test-tube version and 30 seconds utilizing an Autoanalyzer, both at a cost of 2¢, Dr. Wolf said.

If a patient tests positive in the dithionite test screenings, physicians can test specifically for sickle-cell anemia by carrying the test one step further. Urea is added to the turbid system. If hemoglobin S is present, the system will uncloud.

"Only a dithionite solution containing hemoglobin S will uncloud when urea is added," Dr. Wolf said. "The urea-dithionite tube test and automated urea-dithionite test provide us with specific tests for sickle-cell anemia. Non-S sickling hemo-

## Commemorative Stamp Issue Helped Blood Collection

Medical Tribune Report

CHICAGO—Blood procurement was helped importantly this year by the "Giving Blood Saves Lives" postage stamp, according to Dr. John Bernard Henry, president of the American Association of Blood Banks.

"I believe the commemorative issue stamped out blood shortages for six months," said Dr. Henry. Many blood banks had new donors. There were headlines like "Blood Drive Huge Success" and "Blood Bank Exceeds All Previous Marks." In contrast with previous years, the New York Blood Center and many other big banks did not need to make special Fourth of July appeals.

Dr. Henry said the Postal Service is being urged to issue stamps to encourage volunteer service of all kinds. Such stamps have been issued in Europe.

globin will remain turbid even after urea is added."

The automated urea-dithionite test requires one minute and costs 4-8¢ per test. Extensive field trials of the dithionite tests have been successfully undertaken at the U.S. Army Medical Research Laboratory Fort Knox, Ky., Dr. Wolf said. The automated dithionite test was used to screen 7,000 troops, with hemoglobin S detected in approximately 100.

The other members of the research team are Lieut. Col. Frank Camp, of the U.S. Army Medical Research Laboratory; Raymond L. Henry, Ph.D., Associate Professor of Physiology at the Wayne State University of Medicine; and Bruce M. Nichols, a chemist at Bldgett Memorial Hospital.

## New Method Can Be Utilized For Hepatitis Screening

From Ortho Research

► A new counter-electrophoretic technique for detecting hepatitis-associated antigen that can be used for routine patient screening in blood banks and clinical laboratories was described by Dr. Daniel Tripodi, Director of Immunology, Ortho Research Foundation.

Dr. Tripodi reported that in several hundred patients, the new clinical technique yielded results that agreed 93 per cent with those attained by more complicated research methods. In addition, 37 per cent of patients with symptoms diagnosed as hepatitis were found to have the associated antigen.

Since the new technique employs animal rather than human antibodies, said Dr. Tripodi, it offers the important advantage of standard specificity obtained through production control. Polating out the antigen concentrations can vary widely, he stressed the necessity of using a standardized antiserum and system for the best results.

Coauthors of the paper were Drs. Albert P. McKee, Ortho Research Foundation; David J. Gocke, Associate Professor of Clinical Medicine, Columbia University College of Physicians and Surgeons; Allan G. Redeker, Professor of Medicine, University of Southern California; and William Pollack, Director of Research, Diagnostics, Ortho Research Foundation.

## Careful Selection of Patients May Cut Radical Mastectomy

Continued from page 1

the breast and all tissue surrounding it for a distance of 3 cm. Patients who had cancers elsewhere than in the breast were excluded from the series, as were those with multiple palpable lumps, those with Paget's disease, and those who had received previous cancer treatment.

All patients in the study, which is continuing, received radiotherapy by linear accelerator for three weeks after their operations. "We tried to keep the radiotherapy the same," Dr. Hayward said. "Thus the study is essentially one of effectiveness of different operations."

### No Difference in Survival

Dr. Hayward reported that after 90 months there was no significant difference between the percentage of patients remaining alive who had received the smaller operation and those who had received the larger. With radical mastectomy 64 per cent were alive; with wide excision 67 per cent were alive.

After five years, Dr. Hayward reported, 89 per cent of the women who had received radical mastectomy had remained free from local recurrence of their tumors, while in those who had received the wide excision only 69 per cent had remained free of such recurrence. However, he noted, where there was local recurrence among those who had received the wide excision operation, it could generally be well handled by surgery.

In women with small breasts, the wide excision operation made a considerable cosmetic change. In one case, for which he showed a slide, the breast operated on had been so altered in shape by the wide excision method that, from the cosmetic point of view, he believed the result was probably no better than with radical mastectomy. In women with larger breasts, however, the wide excision made less change. In one patient, whose photograph was projected for the conference, there was virtually no visible difference between the breast operated on and the other.

Dr. Hayward said psychological tests were used to determine the emotional effects of the two operations. Among those who had received the radical operation 14 per cent were found to have a "poor attitude," while among those with the smaller operation only 4 per cent were found to have a poor attitude. These patients were examined 14 months after their operations.

### Not Advocating Treatment

In recent weeks, Dr. Hayward said, examination of the two groups has shown that if there are large nodes in the axilla, the survival rate with wide excision is lower than with radical mastectomy. But the survival rate from wide excision is better than that with radical mastectomy in those patients with no nodes in the axilla.

"I am not advocating any particular treatment," Dr. Hayward said, "I am only reporting findings. But I think we can expect in the future to be able to select the patients who will benefit from the simpler operation."

Dr. Hayward's view of a coming im-

provement in the selection of patients according to the particular therapy that is appropriate for their individual case was seconded by Dr. Umberto Veronesi, head of the National Cancer Institute, Milan, who called for more research "on selective types of treatment depending on more careful evaluation of the patient." The prognosis in breast cancer, Dr. Veronesi said, is conditioned mainly by distant metastases. "The old maxim 'the smaller the cancer, the bigger the operation' no longer holds," he added.

A French specialist, Prof. Claude Lanne, Centre Anti-cancer, Nice, said doctors should be interested in the "quality" of the survival of the patient, and he added: "What we need is an answer to the fundamental question of the overwhelming emotional blow to the patient of the amputation that is often proposed." There was agreement, including that of the surgeons, when the French immunologist and specialist on the HL-A system, Dr. Jean-Louis Amiel, of the Institut Gustave Roussy, said: "Surgery is not a satisfactory solution to this problem." "There will be no panacea," concluded Dr. Hayward. "There will be no treatment of early breast cancer; there will be many treatments."

## Authorities in U.K. Stop Vaccination for Smallpox

Continued from page 1  
ment's chief medical officer, declared here that the risk of complications from vaccination are now greater than the risk of smallpox infection.

"The scales have just gone down on the other side," he told Medical News-Tribune.

## PHS Expected to Advise End To All Routine Vaccination

Medical Tribune Report

ATLANTA, Ga.—The discontinuance of routine immunization against smallpox is expected to be recommended shortly by the Advisory Committee on Immunization Practices of the United States Public Health Service.

There is no longer a significant risk of importation and spread of smallpox in the United States, said Dr. David J. Sencer, director of the Center for Disease Control here.

No confirmed case of smallpox has been reported in the United States since 1949, Dr. Sencer pointed out. However, six to eight persons die annually from the adverse effects of the immunity shots.

The committee is expected to favor selective protection for medical personnel and travelers in countries where the disease is still prevalent, he said.

It will be up to the health authorities of each state to decide what they are going to do, following the committee's recommendations, Dr. Sencer explained. The committee does not have the authority to enforce its recommendations.

by Olden



## Official Scores Emergency Room's Replacing Family MD

**Medical Tribune Report**  
CHICAGO—A hospital official has expressed alarm over the growing trend of using hospital emergency rooms to replace the family physician.

The official, Lloyd B. Wescott of Rosemont, N.J., participated here in a two-day forum on emergency department organization, administration, and operation. The meeting was sponsored by the Committee on Injuries of the American Academy of Orthopaedic Surgeons.

Mr. Wescott is president of the board of trustees of Hunterdon Medical Center, Flemington, N.J., and a member of the American Hospital Association committee that drew up that organization's proposal for national health care legislation.

He observed that "the emergency room is a facility few community hospitals can fail to provide," but that there is one development affecting emergency room service "that I view with great alarm." "More and

more," Mr. Wescott said, "the emergency room is replacing the family physician, being asked to provide care which is not emergent, or need not have been, had more appropriate care been available earlier. This, if continued, will, quite simply, swamp the system."

Mr. Wescott outlined several reasons for the growing use of the emergency room to replace the family physician:

- One of these is "the decreasing number of doctors willing to provide a broad spectrum of primary care," growing in part out of the emphasis by medical schools on specialty practice. "More and more people simply 'cannot find a doctor,' and the emergency room is the only alternative."
- Doctors cannot work seven days a week, 24 hours a day, "so the anxious patient, unsure of finding his doctor, is apt to head for the emergency room first."
- The most important reason why emer-

gency rooms are flooded with patients is the advent of Medicare and Medicaid. "For years, hospitals pretended to meet the medical needs of the nation's poor and underprivileged by providing specialty clinics. Now that these people are told they can have a doctor of their choice, they cannot find one and turn to the emergency room for care."

Mr. Wescott said he disagrees with those who maintain that the emergency room is the only way to provide care for patients who cannot find a primary physician. The emergency room, he said, cannot deliver an acceptable quality of primary care, and such care "is bound to be needlessly expensive."



Mr. Wescott

## Special Surgery Hospital Issues a Biannual Review

**Medical Tribune Report**  
NEW YORK—The first issue of *The Review of the Hospital for Special Surgery* is now available. Edited by Dr. Allan E. Ingber, it will appear twice a year.

Its goal "will be to share the experience of the institution—to convey opinion and information from the orthopedic, rheumatic disease, and research services."

Members of the staff will have the opportunity to express their opinions about the proper function of the scientific community in the review's section "Commentary," Dr. Ingber said.

Another section, "Surgeon-in-Chief Conference," will present selected teaching cases with radiographic, pathologic, and medical discussions.

The first issue includes studies of the pathology of cerebral palsy, LSD and gangrene of the hand, and repair of thickness defects in the articular cartilage.

Wednesday, October 6, 1971

MEDICAL TRIBUNE

21

## Vitamin A Deficiencies in the U.S. Seen Neglected in Standards Dispute

**Continued from page 1**

children of migrant workers in Colorado, investigators found significant correlations between low vitamin A levels and the incidence of skin and upper respiratory infections and several other symptoms.

"Who knows, in a child with blood level deficiencies, how far he is from a frankly deficient state, in which symptoms become apparent?" he asked. "Can we not, at the very least, assume that his intake is barely meeting his requirement?"

"If such symptoms are in store for even some of the children with low serum levels of vitamin A, we must be concerned."

Summarizing several recent studies, Dr. Murray said a significant percentage of most age groups in North America lack appreciable liver reserves of vitamin A and 20 to 30 per cent fail to consume the recommended daily allowance. And although most North American adults have ade-

quate blood levels of vitamin A, "an important number" of children fall below the acceptable level, with adverse health effects to some of them.

To help solve the problem, he recommended further study toward better definition of human needs, care in replacing vitamin A lost during processing of foods, and addition of vitamin A to some basic foods, such as flour.

Dr. Murray also urged that a new category of measuring be added, one at which "we do not need to shout 'deficiency' but with which we are not quite satisfied," so that we need not wait until the danger level is reached before sounding the alarm.

The congress was organized by the American Institute of Nutrition and the A.M.A.'s Council on Foods and Nutrition, in cooperation with La Sociedad Latinoamericana de Nutrición and the Nutrition Society of Canada.

## Forest Service Owl Is Wise in Ecology



"Give a Hoot . . . Don't Pollute," says Woody Owl, newest member of the U.S. Forest Service's save-nur-environment campaign. Like his companion Smokey the Bear, he will state message on posters, in advertisements, and on TV-radio broadcasts. Woody—no bird brain when it comes to ecology—meets Clifford Hardin, Secretary of Agriculture, and wife.

UPI Photo

# Announcing a chemically distinct antibiotic for treatment of acute gonorrhea

in the male: acute urethritis and proctitis/in the female: acute cervicitis and proctitis  
when due to susceptible strains of *N. gonorrhoeae*



© 1971 The Upjohn Company

**Sterile Trobicin®** (spectinomycin dihydrochloride pentahydrate)—For intramuscular injection.

2 gm vials containing 5 ml when reconstituted with diluent.  
4 gm vials containing 10 ml when reconstituted with diluent.

An antimicrobial antibiotic active *in vitro* against most strains of *Neisseria gonorrhoeae* (MIC 7.5 to 20 mcg/ml). Definitive *in vitro* studies have shown no cross resistance of *N. gonorrhoeae* between Trobicin and penicillin.

**Indications:** Acute gonorrheal urethritis and proctitis in the male and acute gonorrheal cervicitis and proctitis

in the female when due to susceptible strains of *N. gonorrhoeae*.

**Contraindications:** Contraindicated in patients previously found hypersensitive to Trobicin. Not indicated for the treatment of syphilis.

**Warnings:** Antibiotics used to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Patients should be carefully examined and monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected.

**Safety for use in infants, children and pregnant women:** has not been established.

**Precautions:** The usual precautions should be observed with atopic individuals. Clinical effectiveness should be monitored to detect evidence of development of resistance by *N. gonorrhoeae*.

**Adverse reactions:** The following reactions were observed during the single-dose clinical trials: soreness at the injection site, urticaria, dizziness, nausea, fever and insomnia.

During multiple-dose subchronic tolerance studies in normal human volunteers, the following were noted: a decrease in hemoglobin, hematocrit and creatinine clearance; elevation of alkaline phosphatase, BUN and SGPT. In single and multiple dose studies in normal vol-

**High cure rate: 96% of 571 males, 95% of 294 females** (Dosages, sites of infection, and criteria for diagnosis and cure are defined below.)\*\*

**Assurance of a single-dose, physician-controlled treatment schedule**

**No allergic reactions occurred in patients with an alleged history of penicillin sensitivity when treated with Trobicin, although penicillin antibody studies were not performed**

**Active against most strains of *Neisseria gonorrhoeae* *in vitro* (MIC 7.5-20 mcg/ml)**

**A single two-gram injection produces peak serum concentrations averaging about 100 mcg/ml in one hour** (average serum concentrations of 15 mcg/ml present 8 hours after dosing)

\*Data compiled from reports of 14 investigators.

\*\*Diagnosis was confirmed by cultural identification of *N. gonorrhoeae* on Thayer-Martin media in all patients. Criteria for cure: negative culture after at least 2 days post-treatment in males and at least 7 days post-treatment in females. Any positive culture obtained post-treatment was considered evidence of treatment failure even though the follow-up period might have been less than the periods cited above under "criteria for cure" except when the investigator determined that reinfection through additional sexual contacts was likely. Such cases were judged to be reinfections rather than relapses or failures. These cases were regarded as non-evaluable and were not included.

unteers, a reduction in urine output was noted. Extensive renal function studies demonstrated no consistent changes indicative of renal toxicity.

**Dosage and administration:** Keep at 25° C and use within 24 hours after reconstitution with diluent.

**Male:**—single 2 gram dose (5 ml) intramuscularly. Patients with gonorrheal proctitis and patients being treated after failure of previous antibiotic therapy should receive 4 grams (10 ml). In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams (10 ml) intramuscularly is preferred.

**Female:**—single 4 gram dose (10 ml) intramuscularly.

**How supplied:** Vials, 2 and 4 grams—with ampoule of Bacteriostatic Water for injection. With Benzyl Alcohol 0.9% w/v. Reconstitution yields 5 and 10 ml respectively with a concentration of spectinomycin dihydrochloride pentahydrate equivalent to 400 mg spectinomycin per ml. For intramuscular use only. **Susceptibility Powder**—for testing *in vitro* susceptibility of *N. gonorrhoeae*.

**Human pharmacology:** Rapidly absorbed after intramuscular injection. A two-gram injection produces

Intramuscular injections should be made deep into the upper outer quadrant of the gluteal muscle.

**Adult male:**

Single 2 gram dose I.M. in acute gonorrheal urethritis. Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in gonorrheal proctitis and in patients being re-treated after failure of previous antibiotic therapy. In geographic areas where antibiotic resistance is known to be prevalent, initial treatment with 4 grams intramuscularly is preferred.

**Adult female:**

Single 4 gram dose I.M. (should be divided between two gluteal injection sites) in acute gonorrheal cervicitis and proctitis. Safety for use in pregnancy has not been established, nor has safety for use in infants and children.

**Note:** Antibiotics used in high doses for short periods of time to treat gonorrhea may mask or delay the symptoms of incubating syphilis. Since the treatment of syphilis demands prolonged therapy with any effective antibiotic, and since Trobicin is not indicated in the treatment of syphilis, patients being treated for gonorrhea should be closely observed clinically. Monthly serological follow-up for at least 3 months should be instituted if the diagnosis of syphilis is suspected. Trobicin is contraindicated in patients previously found hypersensitive to it.

JA 71-1677

peak serum concentrations averaging about 100 mcg/ml at one hour with 15 mcg/ml at 8 hours. A four-gram injection produces peak serum concentrations averaging 160 mcg/ml at two hours with 31 mcg/ml at 8 hours.

MEB 8-15 11/70

**For additional product information, see your Upjohn representative or consult the package insert.**

**Upjohn** The Upjohn Company, Kalamazoo, Michigan 49001

## Evidence Found That Aging 'Turns Off' Protein Synthesis

Continued from page 1

Instructions furnish six different codons for leucine, there also are six species of tRNA to pick it up, which they do if properly aminoacylated by synthetase.

One of the first findings was that the relative amounts of the six tRNA species change with cotyledon age. The total effect was a 50 per cent reduction in leucine-acceptor activity in 21-day cotyledons compared with five-day-old leaves.

A more detailed picture of the aging effect emerged when the investigators moved the mechanisms in vitro so that young synthetase could be used to charge old tRNA and vice versa.

When old synthetase was used to charge young tRNA, a distinct unbalance appeared among the six isoaccepting species—numbers 1 through 4 fell off markedly to acylation while 5 and 6 were charged nearly as well as they had been with young synthetase.

The converse experiment—young enzyme to charge old tRNA—turned up similar results. The over-all conclusion from both mixes was that tRNA species 5 and 6 become the predominant leucine acceptors in the old cotyledon.

Several different versions of the mixed-

age charging experiment further confirmed that age reduced the acylation of leucyl-tRNA species 1 through 4 without really cramping 5 and 6.

Moreover, it was demonstrated that increasing the amount of old synthetase to charge tRNA actually lowered the charging rate, indicating an inhibitor function somewhere in the works.

### Aging a Programmed Process

The results, said Dr. Strehler in an interview, are consistent with a hypothesis that aging is a programmed developmental process and not simply the "wearing out" of un replenished parts. The results also indicate that the variability of genetic "language"—as in the six different codons for leucine—may well play a part in the programming.

Thus a genetic message designed to change the nature of enzyme production in a developing cell must also turn off the cell's former enzyme production. If the mechanism entails a shift in the machinery's ability to translate the genetic message, then the inhibitor function must be coded in some language the cell can still understand. In the cotyledon situation, for instance, the sheer accumulation of

charged tRNA might form part of the inhibitory complex.

Dr. Strehler likened the genetic language shift in development to "a treasure hunt game, where you go to one place to get the instructions to the next place."

If sequential instructions are somehow written in different codons for the same amino acid, then those codons are not really redundant. About 20 amino acids go into protein manufacture, but there are more than 60 possible triplet codons in a cell's genetic material in order them up. Most amino acids—including all of the essential ones—are coded by more than one triplet.

Since the genetic code is universal for living things, perhaps the surplus of codons really is redundant in bacteria, Dr. Strehler conceded. But when the living thing is an aggregation of highly differentiated cells, then the variability of genetic language becomes a possibility for a control mechanism.

Dr. Strehler discussed the work and its implications at a session on the biology of aging, conducted at the Jackson Laboratory under the sponsorship of the National Institute of Child Health and Human Development.

## Lake Mercury Studied



Natural mercury decontamination is accelerated in eutrophic lakes, reports Frank D'Itri, Ph.D., of Michigan State University, East Lansing. He is studying two lakes—one eutrophic, one oligotrophic. Above, Dr. D'Itri (right) and lab supervisor Charles Annett test for mercury by using the flameless technique of atomic absorption.

## Heart Surgery: Many Hospitals Are Underutilized

Medical Tribune Report

NEW YORK—Many of the nation's hospitals performing cardiac surgery are underutilized to a degree that raises serious questions about their value, the Inter-Society Commission for Heart Disease Resources said.

The commission's surgery study group declared in a report that a minimum of four to six open heart operations should be performed weekly in cardiac centers.

Previously, it was the judgment of medical circles that two open heart cases a week constitute the minimum for an effective open heart surgical program, but the I.C.H.D. said that unless more open heart operations are performed in these hospitals, the professional staff may find it difficult to maintain their skills.

Furthermore, the commission said, under present conditions the expense of maintaining costly facilities for open heart surgery seems economically unsound.

### Results of Surveys Cited

The report cited results of two surveys of hospitals performing one or more cardiac procedures annually. In 1961, of 28 hospitals surveyed, only nine performed four or more open heart operations a week (200 a year). In 1969, of 360 hospitals surveyed, only 15 performed 200 or more operations a year, while almost one-half performed only 10 to 49.

The report stressed that if cardiac centers—primarily located in the larger cities or in communities with medical schools—are to avoid the problem of underutilization, a reasonable system of referral and transportation must be developed.

The most pressing problem of any cardiac surgical center, according to the report, is the recruiting of adequate staff, since cardiac surgery requires 24-hour coverage and generous staffing at all levels—including qualified medical, surgical, anesthesiologic, radiologic, nursing, and technical personnel. Two and preferably three qualified cardiac surgeons were recommended for a center handling five to six open heart cases a week.

Chairman of the surgery study group, Dr. J. Gordon Scannell, Associate Professor of Surgery at Harvard Medical School and visiting surgeon at Massachusetts General Hospital.

### Chess Solution

Black wins by 27 Q-R5 ch, K-N1 (27... K-B1 fails to 28 B-K3, P-QN3; 29 Q-R6 ch etc.); 28 B-K5 ch, K-R1; 29 QxRP ch, KxR; 30 R-QR3 ch, K-N3; 31 R-QN1 mate.

## the assistant 'skin specialist'

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Consistently kept patients asleep for 7 to 8 hours

### From laboratory to laboratory.

Dalmane (flurazepam HCl) 30 mg usually induced sleep within 22 minutes, decreased nocturnal awakenings and provided 7 to 8 hours of sleep without need to increase dosage during the night, as demonstrated by more than 4300 hours of electro-occlusive measurements in live sleep laboratories.

### From patient to patient.

Dalmane 30 mg was found to be effective for patients with difficulty in falling asleep, staying asleep or both.

### From night to night.

Of three hypnotic agents—chloral hydrate 1000 mg, glutethimide 500 mg, and Dalmane 30 mg—evaluated in studies in a sleep laboratory, only Dalmane 30 mg both induced and maintained sleep for 14 consecutive nights of use.

### With relative safety, as reported in clinical studies.

Instances of morning "hang-over" have been relatively infrequent; paradoxical reactions (excitement) and hypotension have been rare. Dizziness, drowsiness, light-headedness and the like were the side effects noted most frequently, particularly in the elderly or debilitated.

References: 1. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley, N. J. 2. Kahn, A., et al. Arch. Gen. Psychiat. 23:226, 1970.

Before prescribing Dalmane (flurazepam HCl), please consult Complete

Product Information, a summary of which follows:

**Indications:** Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakenings, in patients with recurring insomnia or poor sleeping habits, and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

**Contraindications:** Known hypersensitivity to flurazepam HCl.

**Warnings:** Caution patients about possible combined effect with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operate machinery or driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported in recommended doses, use caution in a person with a history of addiction-prone individuals or those who might misuse drugs.

**Precautions:** In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS depressant effects, consider potential additive effects. Employ great care, especially in patients who are severely depressed, or with latent depression or suicidal tendencies. Monitor blood counts and liver and kidney function tests and adjust dosage if needed. Observe usual precautions in presence of impaired renal or hepatic function.

**Adverse Reactions:** Drowsiness, dizziness, lightheadedness, staggering, ataxia and falling have occurred in patients who are elderly or debilitated patients. Severe reactions, including decreased motor activity, a probable indication of drug intolerance or hypersensitivity, have been reported. Also reported were headache, lethargy, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, lack of energy, apprehension, irritability, weakness, paresthesia, chest pain, body and joint aches, and GI complaints. There have also been rare occurrences of sweating, flushing, difficulty in breathing, blurred vision, burning eyes, lacrimation, hypotension, changes in the voice, slurred speech, dry mouth, bitter taste, excessive salivation, abnormal capillary refill, blurred speech, confusion, restlessness, hallucinations and elevated SGOT, SGPT, total and direct bilirubin and alkaline phosphatase. Paradoxical reactions, e.g., excitement, stimulation and hyperactivity, have also been reported in rare instances.

**Supplied:** Capsules containing 15 mg or 30 mg flurazepam HCl.

**Dalmane®**  
(flurazepam HCl)

One 30-mg capsule h.s.—usual adult dosage.  
One 15-mg capsule h.s.—initial dosage for elderly or debilitated patients.

ROCHE

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Nutley, New Jersey 07110

# Smoking, Drinking, and Experimenting With Other Drugs Among Marijuana Users and Nonusers\*

Percentage Who Have...	Marijuana users		
	Nonusers of Marijuana (1,424)	Experimenters (158)	Occasional and frequent users (103)
SMOKED CIGARETTES	22%	91%	78%
DRUNK LIQUOR APART FROM FAMILY	45%	91%	93%
TRIED OTHER DRUGS**			
Heroin	1	0	12
LSD	1	0	55
Glue	3	10	37
"Downs" or barbiturates	1	18	71
"Ups" or amphetamines	1	38	74
Tried one or two of the five drugs	2	35	29
Tried three or more of the five drugs	1	6	51

\*This is based on a weighted sample of 1,701 (the actual number interviewed was 498). The totals of nonusers and marijuana users do not add up to 1,701 because not all respondents provided information about their behavior with regard to the drug. Experimenters were those who had used marijuana one to nine times; occasional and frequent users were those who had used it 10 or more times.

\*\*18 per cent of the occasional and frequent marijuana users did not answer the question about heroin use; 12 per cent of the occasional and frequent users did not answer the question about use of glue. The percentage of nonusers of marijuana, experimenters, or occasional and frequent users who did not answer questions about other drugs in no case exceeded 6 per cent.

## 15% of Americans Aged 12-17 Found to Have Smoked 'Pot'

Continued from page 1

the youngsters surveyed as "experimenters"—that is, those in the 12-to-17 age bracket who have tried marijuana no more than nine times. Three per cent were classified as "occasional users," having smoked "grass" from 10 to 59 times, and another 3 per cent as "frequent users," who have tried marijuana 60 times or more.

About one out of seven youngsters was found to have tried marijuana one time or more. The data did not show the sex difference in marijuana use expected by the investigators. According to the sampling, girls were only slightly less likely to have tried the drug than boys, not very different in the frequency of its use, and, if not already using it, not much less interested in trying the drug.

Another surprising fact to emerge from the survey, according to the report, was the number of youngsters who have tried liquor away from home. Almost one-half of the nonusers of marijuana reported imbibing, and among the users of marijuana the proportion was even higher: more than nine-tenths of the "pot" smokers

stated that they have consumed liquor away from home.

The results of the survey, conducted in May, support "the fairly plausible assumption that cigarette smoking is a precursor of marijuana use," according to the authors of the paper, Eric Josphson, Ph.D., Associate Professor; Paul Hoberman and Anne Zanes, research associates; and Jack Blinson, Ph.D., all of whom are in the public health school's division of social medical sciences.

While only 3 per cent of the non-smokers have ever tried marijuana, as many as 50 per cent of smokers have tried it, they said. Conversely, only one in eight nonusers of marijuana has smoked cigarettes, while three-quarters of marijuana users have done so.

### "Experimenters" Smoke Cigarettes

It is worth noting, the investigators added, that the "experimenters" are considerably more likely to be cigarette smokers than the "frequent users" of the drug. In the survey group 83 per cent of the former are also cigarette smokers, but among the latter the figure falls to 64 per cent.

It is possible, the team observed, that while youthful cigarette smoking may "lead" to marijuana use, the taste for cigarettes may decrease as use of the drug increases.

The report emphasized the close relationship between the use of Cannabis sativa and experimentation with other mood-changing drugs. Among the nonusers of marijuana in this survey, no more than 3 per cent said they have tried any of the five other drugs included in the questionnaire. The marijuana users, on the other hand, were far more likely to have tried these drugs, with the frequent users of marijuana reporting by far the greatest use.

Thus, among the latter, 91 per cent have also tried amphetamines, 82 per cent have taken barbiturates, 62 per cent have used LSD, 33 per cent have sniffed glue, and 11 per cent have taken heroin.

### Region, Age Combine as Factors

Another major finding was that it is not region or age alone that accounts for differences in the use of marijuana but a combination of these two factors. The data indicated that regional differences became more pronounced among the older adolescents in the sample. While 11 per cent of the Southern youngsters from 12 to 17 years old reported smoking "pot," in the Northeast the proportion is 20 per cent and in the West 23 per cent. Among 16- and 17-year-olds, however, while only 13 per cent of the Southern sample reported use of the drug, the percentages in the Northeast and West were 33 and 39 per cent, respectively, in this latter age category.

In contrast with this age difference, the authors reported finding no major age differences in the proportions of nonusers who said they would like to try marijuana—possibly because as many older youths as want to use it are doing so, while the younger ones have not yet satisfied their interest in the drug.

Another area of interest to the Columbia research team was the relationship between family income and marijuana use. It was found that 6 per cent of youngsters from families with an annual income under 10,000 have tried pot, in contrast to 19 per cent of youngsters from families with income of \$15,000 or over.

### EPIGRAMS—Clinical and Otherwise

Physicians and public health officials, like soldiers, are always equipped to fight the last war.  
—Rabbi J. Dubos [1901—]  
The Dreams of Reason, Ch. IV

# happy anniversary?



A time for her to look back.  
For you to look ahead...to the long course of therapy required to hold her blood pressure down.

Because she has sustained hypertension, decisive therapy should start right now. With Ismelin. Before hypertension progresses further.

Because Ismelin is guanethidine. Perhaps the most effective antihypertensive ever available.

It's often right for the patient who's a long-term proposition. Like most patients with sustained hypertension. Because when blood pressure is controlled with Ismelin, it usually stays controlled.

For the immediate situation. For long-term management. Ismelin.

## Ismelin sulfate (guanethidine sulfate) the antihypertensive for what may lie ahead

INDICATIONS: Primarily for severe or sustained elevation of blood pressure (particularly diastolic) and almost all forms of fixed and progressive hypertensive disease, even when blood pressure elevation is moderate. Not recommended for labile or milder forms of hypertension.

CONTRAINDICATIONS: Proven or suspected pheochromocytoma; hypersensitivity to Ismelin. Do not use with MAO inhibitors.

WARNINGS: Ismelin is a potent drug and can lead to disturbing and serious clinical problems. Warn patients not to deviate from instructions and about the potential hazards of orthostatic hypotension, which can occur frequently. To prevent fainting, patients should sit or lie down with onset of dizziness or weakness, which may be particularly bothersome during initial dosage adjustment and with postural changes. Postural hypotension is most marked in the morning and is accentuated by hot weather, alcohol, or exercise. Warn patients to avoid sudden or prolonged standing or exercise while taking Ismelin. Concurrent use with rauwolfia derivatives may cause excessive postural hypotension, bradycardia, and mental depression.

If possible, withdraw therapy 2 weeks prior to surgery to avoid possible vascular collapse and to reduce hazard of cardiac arrest during anesthesia. If emergency surgery is indicated, administer preanesthetic and anesthetic agents cautiously in reduced dosage with oxygen, atropine, and vasopressors ready for immediate use. Give vasopressors with extreme caution because patients on Ismelin may have a greater propensity for cardiac arrhythmias. Febrile illness may reduce dosage requirements. In frank congestive heart failure not due to hypertension, Ismelin is not recommended. Due to catecholamine depletion and increased responsiveness to norepinephrine, special care is required when treating patients with a history of bronchial asthma, since the condition may be aggravated.

Use in Pregnancy  
The safety of Ismelin for use in pregnancy has not been established; therefore, this drug should be used in pregnant patients only when, in the judgment of the physician, its use is deemed essential to the welfare of the patient.

PRECAUTIONS: Give very cautiously to hypertensives with (a) renal disease with nitrogen retention; (b) coronary disease with insufficiency or recent myocardial infarction; (c) cerebral vascular disease, especially with encephalopathy; and (d) rising BUN levels. Give with extreme caution to those with severe congestive failure. Watch for weight gain or edema in patients with incipient cardiac decompensation. If digitalis is used with Ismelin, remember that both drugs slow the heart rate.

Appetite suppressants (eg, amphetamines), mild stimulants (eg, ephedrine, methylphenidate), and tricyclic antidepressants (eg, imipramine, nortriptyline, doxepin) may decrease the hypotensive effect of Ismelin. Wait one week after discontinuing MAO inhibitors before starting Ismelin.

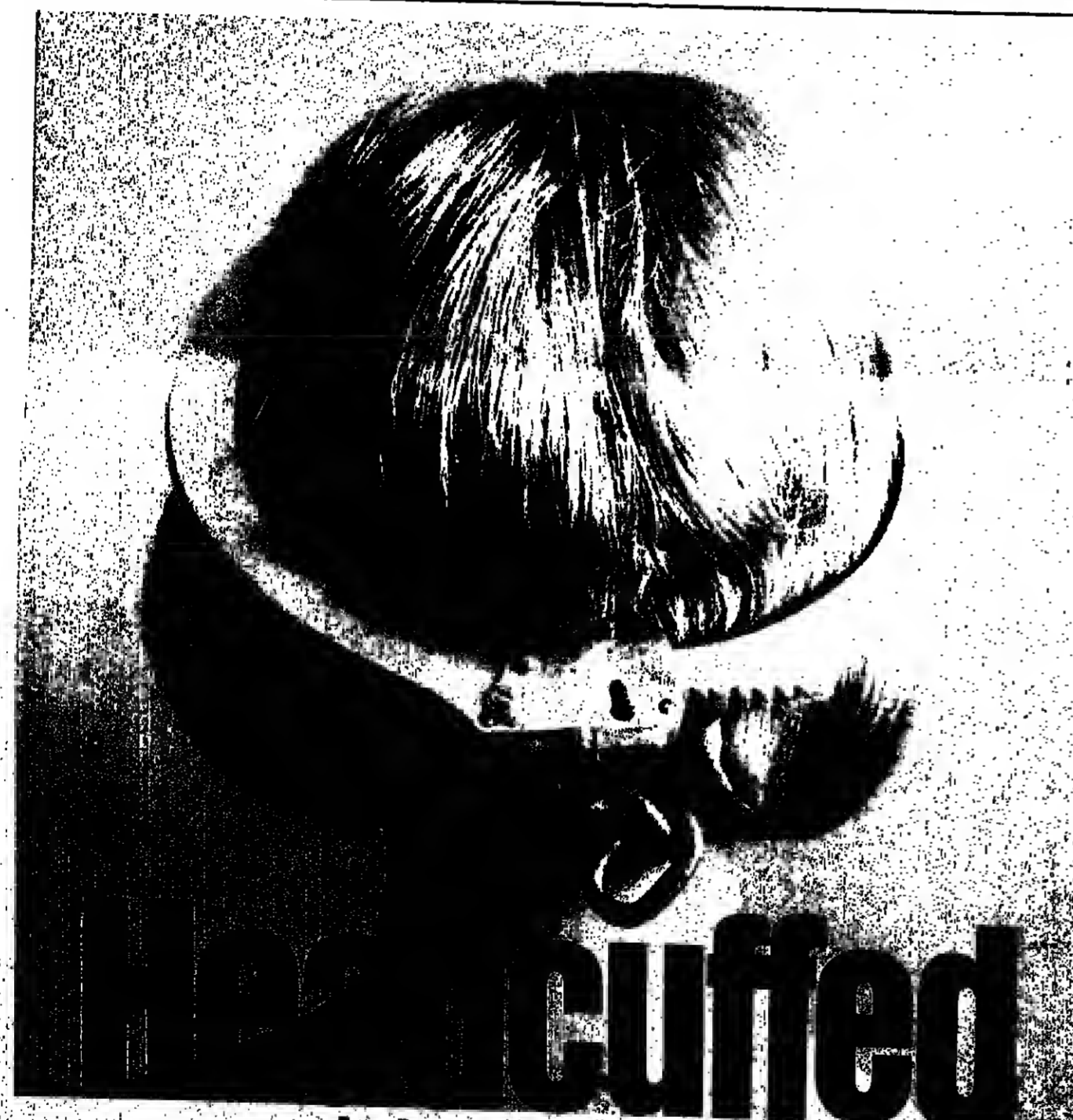
Peptic ulcers or other chronic disorders may be aggravated by a relative increase in parasympathetic tone. Periodic blood counts and liver function tests are advised during prolonged therapy.

ADVERSE REACTIONS: Frequent reactions due to sympathetic blockade—dizziness, weakness, lassitude, syncope. Frequent reactions caused by unopposed parasympathetic activity—bradycardia, increase in bowel movements, diarrhea (which may be severe and require discontinuation of the drug). Other common reactions—inhibition of ejaculation, fluid retention, edema, congestive heart failure. Less frequently—dyspnea, fatigue, nausea, vomiting, nocturia, urinary incontinence, dermatitis, scalp hair loss, dry mouth, rise in BUN, pruritus of the lids, blurring of vision, parotid tenderness, myalgia, muscle tremor, mental depression, chest pains (angina), chest paresthesias, nasal congestion, weight gain, and asthma in susceptible individuals. DOSAGE: Initial dosage should be low and increased gradually by small increments.

Before starting therapy, consult complete product literature. HOW SUPPLIED: Tablets, 10 mg (pale yellow, scored) and 25 mg (white, scored); bottles of 100 and 1000.

CIBA Pharmaceuticals Company  
Division of CIBA-GEIGY Corporation  
Summit, New Jersey 07901

C I B A



by tension headache

Let Fiorinal help release the patient from the aching, pressing, painfully tight feeling of tension headache; its analgesic components help relieve pain while its sedative component helps relax the patient.

## ANALGESIC plus SEDATIVE Fiorinal®

Each tablet or capsule contains: Sandoptal® (butalbital) (Warning: May be habit forming) 60 mg.; caffeine, U.S.P., 40 mg.; aspirin, U.S.P., 200 mg.; phenacetin, U.S.P., 130 mg.

Contraindications: Hypersensitivity to any of the components.

Precautions: Due to presence of e. barbiturate, may be habit forming. Excessive or prolonged use should be avoided.

Side Effects: In rare instances, drowsiness, nausea, constipation, dizziness, and skin rash may occur.

Adult Dosage: One to two tablets or capsules, repeated if necessary up to 6 per day, or as directed by physician. Before prescribing, see package insert for full product information.

PARKEE PHARMACEUTICALS  
EAST HANOVER, N.J.



## Experts Fear Ecologic Risks Of Egypt's Aswan Dam Project

Medical Tribune World Service

Cairo—Medical experts in Egypt fear the consequences of the drastic changes in ecology caused by the recently inaugurated Aswan High Dam.

The Soviet-financed \$1 billion project has expanded the country's cultivable land by nearly 2,000,000 acres and generated huge quantities of cheap electric power.

But medical specialists warn that unless proper precautions are taken, the project could encourage the rapid spread of such diseases as bilharziasis, malaria, ankylostomiasis, onchocerciasis, Bancroft's filariasis, cutaneous and visceral leishmaniasis, and yellow fever. Other health problems include a threat of bronchial asthma and dermatitis to archeologists working in the area.

Some of the threatened diseases are as yet unknown in Egypt, while flourishing in the Sudan. But now the 300-mile-long Lake Nasser links the two countries, reaching into the Sudan along one-third of its length.

The lake waters, irrigation system, seepage areas, rocky as well as silted shores, cultivated lands, and damper climate provide ideal breeding grounds for a variety of disease vectors that include the Sudan's Anopheles gambiae and the sandfly Phlebotomus orientalis. The latter is a carrier of kala-azar.

### Migrants Could Bring Disease

Some other diseases, such as intestinal bilharziasis and Bancroft's filariasis, are prevalent in the Delta rather than in this area but could easily be introduced by infected fishermen and farmers migrating south, experts say.

Faced with these risks, the Egyptian Government has established a medical entomologic laboratory, which carries out vector sampling and parasite testing with the help of World Health Organization epidemiologists and hydrologists.

The most serious immediate problem in the area is bilharziasis, which costs the nation about \$200,000,000 a year in medical care and lost production. Statistics indicate that one in every two Egyptians has the disease, and one conservative report

estimates the new dam could expose another 2,000,000 persons, of whom 70 per cent could be infected. Proper water management and improved agricultural practices, however, could considerably reduce the risk.

Research teams have found that Bilharzia-carrying snails infect the entire length of the lake's rocky shore areas. At present, only the type causing urinary disease prevails, but a WHO epidemiology consultant, Dr. M. H. Satti, says the intermediate host of intestinal bilharziasis, Biomphalaria, could be brought by migrating birds attracted to the huge expanse of water. If not by birds, he adds, it will almost certainly be introduced by infected fishermen and farmers migrating from the Delta.

WHO is sponsoring a large Bilharzia control project with extensive antismail chemical tests in Behira province.

Another major worry is the return of Anopheles gambiae from the Sudan.

"It is needless to overemphasize this danger in view of the bitter experience in the United Arab Republic in 1942, when



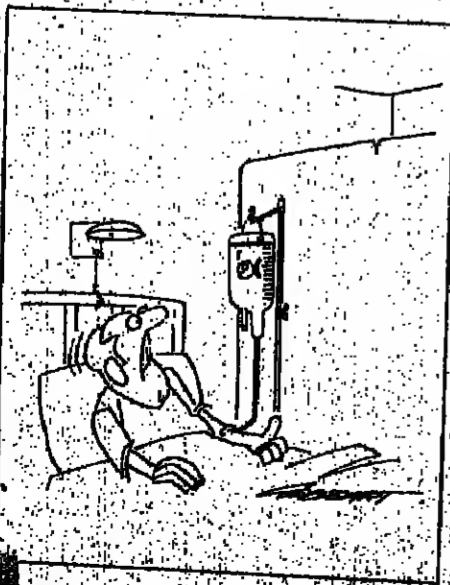
Child in Lake Nasser region undergoes an examination. New diseases threaten the area because of ecologic changes resulting from flak-up of Egypt and Sudan by the dam-created lake.

there were over 1,000,000 malaria cases and 100,000 deaths," said Dr. Satti. "If A. gambiae is now allowed to gain a foothold in the lake area, it would be much worse and the devastation would be far-reaching in its effects."

## symbol of shattered lives

Language descriptive of our everyday emotions derives from normal experience, pleasant or unpleasant. This common language, no matter how fluent, cannot convey the pathological desolation of the depressed patient. Rather, depression is communicated by symptoms, by symbol, by music, painting, ballet, or other art forms. For thousands of years in the Western World, long before it was published in Mother Goose, Humpty Dumpty, the broken egg, was symbolic of a shattered life. In depression, the associated loss of self-esteem is so shattering and so remote from normal feelings and self-concepts that the depressed patient feels his world is as irrevocably ruined as that of Humpty Dumpty—and that nothing can ever put it back together again. Fortunately, depression responds to today's therapeutic armamentarium.

**IN BRIEF:**  
**ACTION:** Norpramin® (desipramine hydrochloride) is a tricyclic antidepressant drug having a faster onset of action than imipramine.  
**INDICATIONS:** In the treatment of any kind—neurotic or psychotic.  
**CONTRAINDICATIONS:** Recent myocardial infarction. Sensitivity. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor.  
**WARNINGS:** Extreme caution should be used in patients with a history of cardiovascular disease, glaucoma, urinary or ureteral spasm, or with thyroid, anticholinergic or sympathomimetic drugs. Overdosage may cause hypotension, which may be relieved by the use of atropine. Safety in pregnancy has not been established. Do not use in children under 12 years. Precautions for operating machinery should be observed about possible loss of mental or physical abilities.  
**PRECAUTIONS:** Desipramine hydrochloride should not be substituted for hospitalization when risk of suicide or homicide is considered grave. Significant ingestion of large dosages may be fatal. If serious adverse effects occur, rapid dosage or other treatment. In patients with manic-depressive illness a hypomanic state may be induced. In schizophrenia, exacerbation of psychosis may occur. Patients should be warned of possible overreaction to alcohol, barbiturates, and other sedatives. May be used with ECT but hazards are increased.  
**ADVERSE EFFECTS:** The following have been encountered: dry mouth, constipation, dizziness, palpitation, delayed urination, agitation and stimulation ("jitters"), "anxiety," "nervousness," "anxiety," "insomnia," bad taste, sensory illusion, dizziness, sweating, drowsiness, headache, hypotension (orthostatic), flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, tremor, allergy (general), altered liver function, stasis and extrapyramidal signs; agranulocytosis. Additional side effects more recently reported include: salivary gland hypertrophy, confusion, ataxia with hallucinations, purpura, photosensitivity, galactorrhea, gynecomastia, and impotence. Side effects which could occur (analogy to related group) include weight gain; hepatitis, anorexia, and hand-arm paresthesias.  
**DOSEAGE:** Optimal results are obtained at a dosage of 50 mg. i.d. (150 mg./day).  
**SUPPLY:** NORPRAMIN (desipramine hydrochloride) tablets of 25 mg.; bottles of 50, 500 and 1,000; and tablets of 50 mg. in bottles of 50, 250, and 1,000.



## Blindness Study Unit Gives Research Prize

NEW YORK—Drs. David H. Hubel and Torsten N. Wiesel, Professors of Neurobiology at Harvard Medical School, share the \$25,000 R.P.B. Trustees Award presented by Research to Prevent Blindness, Inc., for outstanding achievement in eye research.

"Drs. Hubel and Wiesel, in a scientific partnership covering 12 years, have traced the path of light entering the eye to specialized cells in the brain," R.P.B. said. "They have discovered that sight is controlled by a hierarchy of brain cells, with each single cell passing on a small fragment of high specialized visual information to a growing complexity of cells, to be integrated into a complete image."

"They have found that vital functional cells—including the ability to merge the signals from both eyes into a single coherent image—may 'turn off' forever if they are not properly stimulated by signals from the eye during a critical early stage of development."

Their findings were said to be having a revolutionary influence on the understanding and treatment of strabismus, amblyopia, congenital cataracts, and other serious eye disorders in children.

Wednesday, October 6, 1971

MEDICAL TRIBUNE

27

## Full Urologic Diagnosis Urged for Abdomen Masses in Children

Medical Tribune Report

COLUMBIA, Mo.—The importance of complete urologic diagnosis before the institution of treatment for abdominal masses in children was emphasized by two investigators from the University of Missouri School of Medicine here.

"The diagnostic dilemma presented by abdominal masses in children often engenders a sense of urgency that can provoke hasty and incomplete study of the patient," warned Drs. R. Mark Kirk and Jan M. Thompson.

"It must be publicized that the majority of these masses arise from the genitourinary tract and that complete urologic evaluation is needed to avoid misdiagnosis or precipitous exploratory surgery and its attendant hazards," they declared.

"There are relatively few instances when a brief interval of additional urologic study cannot confirm or exclude a genitourinary derivation of a mass and thereby obviate unfortunate situations that can be engendered by exploratory coeliotomy," the urologists said.

During a 10-year period, 60 children with abdominal masses of questionable causes presented at the University Hospital, and the genitourinary tract was found to account for 46 of the masses, or 77 per

cent, they said. All but five of these masses arose from the kidney, and hydronephrosis was the most frequent finding.

They called attention to similar findings by Melicow and Uson, resulting from a 22-year survey of 653 abdominal masses in children, in which benign conditions were found to outnumber malignancies and hydronephrosis was labeled "invariably the single most common cause of a mass."

### Gastrointestinal System Next

Although the gastrointestinal system was the next most common source of abdominal masses, it accounted for only seven cases, or 12 per cent of the total. The biliary system was responsible in four cases, and the remaining masses were an islet cell tumor of the pancreas, a malignant teratoma, and a mucoepithelioma.

"Although exploratory laparotomy eventually can clarify the etiology of a mass, inadequate preoperative information can instigate an inappropriate incision and operative approach to the abnormality, thereby prolonging the surgical procedure and perhaps hampering a definitive solution of the problem," the physicians said.

"Occasionally," they added, "inadvertent disruption of important structures may engender an irreparable situation."

Among the cases they described to illustrate the hazards of precipitous surgical exploration was that of a two-month-old infant with a large mass in the lower abdomen. Cystogram showed the bladder displaced anteriorly and to the right, and on the excretory urogram the child had normal tracts but the ureters were displaced anteriorly and laterally.

Diagnostic possibilities were felt to include teratoma, leiomyosarcoma, and neurogenic tumor. On exploration, a large cystic mass was found extending from the pelvis. The mass was found in part posterior to the bladder neck to a small pedicle between the seminal vesicles. When the pedicle was transected, the prostatic urethra was excised.

At this point, the physicians said, it was apparent that the mass was a large uterine cyst. Urologic consultation was obtained and the urethra repaired. In this case, the urologists remarked, a simple procedure, such as paucoscopy, probably could have clarified the lesion and perhaps prevented injury to the child's urethra.

The report by Drs. Kirk and Thompson was presented before the Section on Urology at the 120th annual A.M.A. convention, in Atlantic City, N.J.



RUDOLPH VIRCHOW

CREATOR of the science of pathology. Rudolph Virchow (1821-1902) was born 150 years ago in Pomerania. He received his medical degree in Berlin in 1843.

He founded the journal, since known as Virchow's Archives, in 1847. It included medical, anthropologic, and historical articles.

Cellulopathologie, a medical milestone, was published in 1858. He stressed the cellular nature of life processes and that every new growth originates from pre-existing cellular components. East Germany issued the stamp in 1952, part of a series honoring famous Germans.

Text: Dr. Joseph Kler  
Stamp: Minkus Publications, Inc., New York

## Iris-Clip Lenses Used as Implants After Cataracts

Medical Tribune Report

LONG BEACH, CALIF.—Insertion of intraocular prostheses to replace lenses removed because of cataract has had a high rate of success, according to Dr. Henry Hirschman, an ophthalmologist here.

Ninety-six per cent of 150 lenses inserted since December, 1967, have been tolerated well in a quiet eye, he said. About 90 per cent of the patients achieved a visual acuity of 20/40 or better with correction after insertion of the lens, and one-third had 20/40 vision or better without correction. This latter figure could be improved considerably by predetermining the strength of lens required for emmetropia, Dr. Hirschman said.

The implants, which were placed in the anterior chamber of the eye, were thin, light-weight iris-clip lenses.

Seventeen dislocations of the lens occurred. One lens was removed, six were repositioned by surgical manipulation, and 10 were repositioned by drops. Application of pilocarpine 1 per cent twice daily virtually eliminates this problem, Dr. Hirschman said.

He pointed out that even persons who can wear a pair of contact lenses have an awareness of the presence of a monocular contact lens, for if the lens has some movement, there are difficulties of binocular fixation caused by the prismatic effect of its moving vertically.

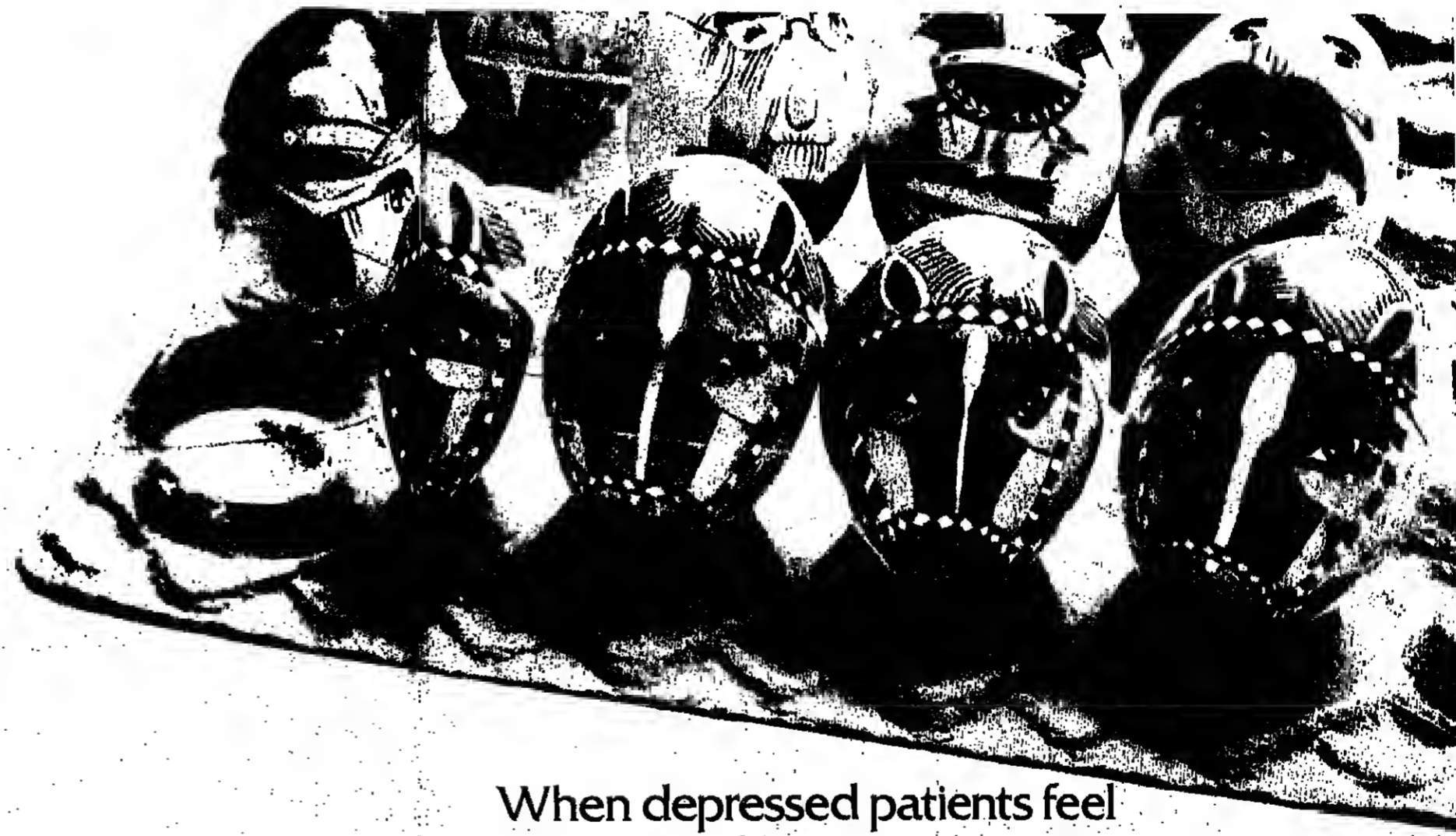
Difficulties were more frequently encountered in the first 50 cases than in the last 50, he noted.

"It will probably be a long time before this procedure becomes the usual treatment for cataract," Dr. Hirschman remarked. "Perhaps it never will. It is sufficiently difficult to discourage the occasional operator. Minor complications with conventional surgery can lead to serious problems if a lens is inserted, especially so if there is any lack of gentleness."

"At this time, it should be considered primarily for patients with monocular cataracts who have no specific contraindication and who are not good candidates for a contact lens."

"The truly long-term results are not yet known, and every procedure must ultimately be evaluated on that basis. We have reason to believe that these lenses will be tolerated in quiet eyes indefinitely, but the iris-clip lens has actually been in use only 14 years."

Dr. Hirschman spoke before the Section on Ophthalmology at the 120th annual convention of the A.M.A., in Atlantic City, N.J.



When depressed patients feel

that all the king's horses  
and all the king's men  
cannot put them  
together again...

Improvement often begins in 2-5 days

**NORPRAMIN**  
(desipramine hydrochloride)







is g  
yet promi

But most patients rarely need it. Which is why hydrochlorothiazide — originated by

Diuresis is prompt; edema is relieved gradually over a 12-hour period. Which is usually fast enough. Just as important, it's smooth and gentle.

Things are complicated enough for the edema patient. Rely on Esidrix, the smooth, gentle diuretic. Particularly in maintenance therapy.

Hypertensive patients who cannot be adequately controlled with

And Esidrix is simply proven alone in mild hypertension. As an adjunct in mild to severe cases.

And better than what of which men  
res? if it comes to that.

Nov. 24-30	World Federation for Mental Health Annual Meeting, Hong Kong	Jan. 27-29	American College of Surgeons, Sydney, Australia
Nov. 28-Dec. 4	World Congress of Psychiatry, Mexico City	Feb. 5-12	Asian and Pacific Congress of Gastroenterology, Manila



and below the reach of incentives. spend for rehiring, the cry of "windfall" has a hollow ring.

# Esidrix<sup>®</sup>

(hydrochlorothiazide)  
is often just enough.

100-443870-218

in fetal hyperbilirubinemia, thrombop-

If patient is receiving digoxin. Chloride deficit may be corrected with

These reactions are moderate or severe, reduce dosage or withdraw therapy.

cough. Tablets should be taken with

C I B A

And better than what or where?  
If it comes to that—

Nov. 24-36 World Pen  
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Kong  
Nov. 28- World Can  
Dec. 4 Mexico C

Annual Meeting, Hong Jan. 27-29 . . . A  
Congress of Psychiatry, Feb. 5-12 . . . A

American College of Surgeons, Sydney, Australia  
 Far and Pacific Congress of Gastroenterology, Manila

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to  
fall